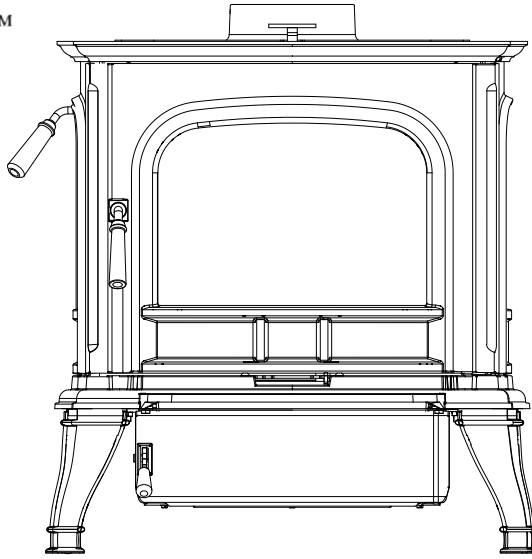


HARMAN™

BUILT TO A STANDARD, NOT A PRICE



Owner's Manual Installation and Operation

Model:
Oakleaf
Non-Catalytic, Top Load,
Wood Burning Room Heater
Item #1-90-797000



NOTICE



DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.

**Do Not
Discard**

WARNING



PLEASE READ THIS ENTIRE MANUAL BEFORE INSTALLATION AND USE OF THIS WOOD-BURNING ROOM HEATER. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN PROPERTY DAMAGE, BODILY INJURY OR EVEN DEATH.

- DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.
- DO NOT OVERFIRE - IF ANY EXTERNAL PART STARTS TO GLOW, YOU ARE OVERFIRING. CLOSE AIR CONTROLS. OVERFIRING WILL VOID YOUR WARRANTY.
- COMPLY WITH ALL MINIMUM CLEARANCES TO COMBUSTIBLES AS SPECIFIED. FAILURE TO COMPLY MAY CAUSE A HOUSE FIRE.

WARNING



HOT SURFACES!

GLASS AND OTHER SURFACES ARE HOT DURING OPERATION AND COOL DOWN.

HOT, WILL CAUSE BURNS.

- DO NOT TOUCH GLASS UNTIL IT IS COOLED
- NEVER ALLOW CHILDREN TO TOUCH GLASS
- KEEP CHILDREN AWAY
- CAREFULLY SUPERVISE CHILDREN IN SAME ROOM AS FIREPLACE.
- ALERT CHILDREN AND ADULTS TO HAZARDS OF HIGH TEMPERATURES. HIGH TEMPERATURES MAY IGNITE CLOTHING OR OTHER FLAMMABLE MATERIALS.
- KEEP CLOTHING, FURNITURE, DRAPERIES AND OTHER FLAMMABLE MATERIALS AWAY.

CAUTION

TESTED AND APPROVED FOR USE WITH DRY, SEASONED CORDWOOD ONLY. DO NOT BURN WET OR GREEN WOOD. BURNING ANY OTHER TYPE OF FUEL WILL VOID YOUR WARRANTY.

CAUTION

CHECK BUILDING CODES PRIOR TO INSTALLATION.

- INSTALLATION MUST COMPLY WITH LOCAL, REGIONAL, STATE AND NATIONAL CODES AND REGULATIONS.
- CONSULT LOCAL BUILDING, FIRE OFFICIALS OR AUTHORITIES HAVING JURISDICTION ABOUT RESTRICTIONS, INSTALLATION INSPECTION, AND PERMITS.

Hearth & Home Technologies welcomes you to our tradition of excellence! By choosing a Harman appliance, you have become part of our commitment to meeting the heating needs of consumers with the most distinctive, powerful and responsible home heating products available.

The Oakleaf has huge features in an elegantly small package. With a heating capacity of 1400 to 1600 ft², The Oakleaf takes advantage of Harman's 30+ years of stove design, technology and manufacturing. The Firedome secondary combustion system provides for super-clean burning and minimal maintenance. The top-loading feature makes for more convenient loading, with enough fuel for an all day burn.

We wish you and your family many years of enjoyment in the warmth and comfort of your hearth appliance. Thank you for choosing Harman.

Harman Home Heating, A division of
Hearth & Home Technologies, Inc.
352 Mountain House Road
Halifax, PA 17032
www.harmanstoves.com

When This Room Heater Is Not Properly Installed, a House Fire May Result. To Reduce The Risk Of Fire, Follow The Installation Instructions. Contact Local Building Or Fire Officials About Restrictions And Installation Inspection Requirements In Your Area.

This Label is located on the rear of the appliance. It contains important safety test information as well as the clearances to combustible materials. The label also contains the appliance serial number. For your records, copy your serial number and purchase date here.

Serial #: _____

Date of Purchase: _____



OAKLEAF Woodburning Stove
Poêle Du Bois OAKLEAF

Serial No. / No de série: **008**

Report # / Rapport # 135-S-26-6.2
Tested to / Testé à: UL 1482-10, and UL 6827-20
Test Date: August 2010
Approved For Use in Mobile/Manufactured Homes- USA ONLY
This appliance is also approved for installation into a shop.

PREVENT HOUSE FIRES
Install and use only in accordance with manufacturer's installation and operation instructions and local codes. In absence of local codes, installation must meet minimum requirements of NFPA 211 in USA. Refer to manufacturer's instructions and local codes for precautions required for passing chimneys through a combustible wall or ceiling.
WARNING FOR MANUFACTURED HOMES: (US Only) Do not install appliance in a sleeping room. An outside air inlet must be provided. The structural integrity of the manufactured home's floor, walls, and ceiling must be maintained.
Flue connector pipe must be 6" diameter, minimum 24 MSG blue steel. Chimney must be factory built 103HT or masonry construction.
Contact Local Building or Fire Officials About Restrictions and Installation Inspection in Your Area.
DO NOT CONNECT THIS APPLIANCE TO A CHIMNEY SERVING ANOTHER APPLIANCE.
FOR USE WITH SOLID WOOD FUEL ONLY Do not burn coal.
DO NOT Overfire - If Heater or chimney connector glows, you are overfiring.
Optional Blower Harman #1-00-797032; Electrical Rating 115 VAC, 60Hz, 1AMP Maximum Route power cord away from unit.
Replace glass only with 5mm ceramic, available from your dealer.
Combustible flooring must be protected with an approved 0.45R hearth board.
Appliance must be installed with the legs attached. Do not obstruct airflow under the appliance.
DANGER: Risk of Fire or Explosion - Do not burn garbage, gasoline, drain oil or other flammable liquids.

WARNING: Risk of Fire
Do not operate with fuel loading or ash removal doors open.
Do not store fuel or combustibles within marked clearances.
Inspect and clean chimney and connector regularly. Under certain conditions of use, creosote buildup may occur rapidly.
The Bypass Damper must be opened prior to opening any load or ash door.
Do not install a grate or otherwise elevate the fire.

CAUTION: HOT WHILE IN OPERATION. DO NOT TOUCH. KEEP CHILDREN AND CLOTHING AWAY. CONTACT MAY CAUSE SKIN BURNS. SEE NAMEPLATE AND INSTRUCTIONS. KEEP FURNISHINGS AND OTHER COMBUSTIBLE MATERIALS A CONSIDERABLE DISTANCE AWAY FROM THIS APPLIANCE.

ATTENTION: CHAUD LORS DU FONCTIONNEMENT. NE TOUCHEZ PAS L'APPAREIL. GARDEZ LES ENFANTS ET LES VÊTEMENTS ÉLOIGNÉS. TOUT CONTACT PEUT ENTRAÎNER DES BRÛLURES DE LA PEAU. RÉFÉREZ-VOUS À LA PLAQUE SIGNALÉTIQUE ET AU MODE D'EMPLOI. GARDEZ LE MOBILIER ET LES AUTRES MATÉRIEL COMBUSTIBLES BIEN À L'ÉCART DE L'APPAREIL.

CLEARANCE TO COMBUSTIBLES / DISTANCES MINIMALES DE SECURITE:

Part/Installation	Inches	Millimeters
A Back Wall / Entre mur arrièrrest l'appareil	14	330
B Side Wall To Unit / Entre mur latéral et l'appareil	17	432
C Back Wall To Flue Pipe / Entre tuyau et le mur arriere	17.5	444
D Side Wall To Flue Pipe / Entre tuyau et le mur latéral	28.75	679

Corner Installation:

Part/Installation	Inches	Millimeters
E Walls to Unit Body / Entre mur adjacent et l'appareil	14	330
F Walls to Flue Pipe / Entre tuyau et le mur adjacent	21.75	552

Floor Protection Requirements:

Part / Côtés	Inches	Millimeters
G Sides / Côtés	8	203
H Front- from glass/Devant, par rapport au verre	18	457
J Rear / Arrière	8	203

Floor protection must be a minimum 3/8" (9.5mm) of 0.84k material, or 0.45R. Must also be placed under any horizontal sections of flue connector, extending 2" (51mm) beyond the measurement of the pipe. Use of bottom heat shield required on protected floor.
Pour protéger le plancher, il faut sous le poêle un matériau (9.5mm / 0.84k), o 0.45R. Qui doit aussi être placé sous les parties horizontales du tuyau de raccord à la cheminée et s'étendre à 51 mm (2 po) au-delà de la mesure du tuyau.

REFER TO MANUFACTURER'S INSTRUCTIONS FOR CLEARANCES WITH ADDITIONAL VENT CONFIGURATIONS.

Made in U.S.A. of US and imported parts. / Fabriqué aux États-Unis d'Amérique par des pièces d'origine américaine et pièces importées.
Date of Manufacture / Date de fabrication:

2010 2011 2012 JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

P.N. 3-90-797
Fabriqué par: Harman Home Heating 352 Mountain House Road, Halifax PA 17032 (E.-U.) IGN

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This room heater must be connected to

1) A chimney complying with the requirements for Type HT chimneys in the standard for Chimneys, Factory-Built, Residential Type and Building Heating Appliance, UL 103

or

2) A Code Approved Masonry Chimney with a Flue Liner.

1 Listing and Code Approvals

A. Appliance Certification

Model: Oakleaf Woodburning Stove
 Laboratory: OMNI-Test Laboratories, Inc.
 Report No. 135-S-26-6.2
 Type: Solid Fuel Room Heater / Wood Burning Type.
 Standard(s): UL1482-10, & ULC S627-00

This appliance is also approved for installation in a shop.

B. Mobile Home Approved

This appliance is approved for Installation in mobile/ manufactured homes in the **US only**. The structural integrity of the mobile home floor, ceiling and walls must be maintained. The appliance must be properly grounded to the frame of the mobile home, and must never be installed in a room designated for sleeping. The unit must have provisions for an outside air source when installed in a mobile home.

C. Glass Specifications

This appliance is equipped with 5mm ceramic glass. Replace glass only with 5mm ceramic glass. Please contact your dealer for replacement glass if needed.

D. Electrical Rating

Optional Blower: 115 VAC, 60 Hz. <1 Amps

E. BTU & Efficiency Specifications

Particulate Emissions Rating:	2.2g/hr Avg
*BTU Input:	15,000 - 39,000 / hr
Heating Capacity:	1,400-1,600 sq. ft.††
Firebox Size:	1.7 cu. ft.
Fuel:	Dry Cordwood
Shipping Weight:	430 lbs.

*BTU input based on EPA test fuel. Actual cordwood values will vary.

††Heating capacity based on zones 1 and 2, covering the Northern United States.

2 Special Warnings and Notes

Carbon monoxide, referred to as CO, is a colorless, odorless gas that is produced during combustion of wood and other fuels. **CO fumes are toxic and can be fatal.**

The Oakleaf is a natural draft system which relies on a properly designed chimney to remove CO and other combustion by-products from the stove.

Even though this stove is designed to be as safe as possible, it is important that you **install a CO detector**. This is true for oil, gas, or coal burning products as well.

CO is not specifically heavier or lighter than air. Therefore, it is best to install the detector at table top level rather than on the ceiling like a smoke detector.

CO detectors are very sensitive and may sound an alarm for fumes other than CO or CO from sources other than the stove such as car or lawn mower exhaust.

If the alarm sounds

1. Increase ventilation by opening windows or doors.
2. Make sure the stove doors and lid are closed and latched.
3. Check stove for smoking or puffing condition. Open by-pass and increase air-flow to firebox, if needed.
4. Check chimney for possible blockage or down-draft.
5. Check for false alarm.

Never use gasoline, lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or “freshen up” a fire in this heater. Keep all such liquids well away from the heater while it is in use.

SPECIAL NOTE:

DUE TO ASH BUILDUP, IT IS STRONGLY RECOMMENDED TO HAVE YOUR STOVE PROFESSIONALLY CLEANED AND SERVICED ANNUALLY. THIS INCLUDES ALL PARTS OF THE STOVE, AND THE VENTING SYSTEM.

IF INSTALLING ON A COMBUSTIBLE FLOOR, THE BOTTOM HEAT SHIELD MUST BE INSTALLED ALONG WITH PROPER FLOOR PROTECTION MATERIAL.

NEVER CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.

Installation and repair of this stove should be done by a qualified service person. We recommend that the stove be inspected before use and at least annually by a qualified service person. Periodic cleaning is required throughout the heating season and at the end of each winter for the stove to work efficiently.

DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.

3 Getting Started

A. Design, Installation & Location Considerations

1. Appliance Location


Consideration must be given to safety, convenience, traffic flow, and the fact that the appliance will need a chimney and chimney connector. It is a good idea to plan your installation on paper, using exact measurements for clearances and floor protection, before actually beginning the installation. When installing on a combustible floor, the optional bottom heat shield must be installed along with using proper floor protection material. See page 12 for details.

Maintain specified vent clearance to combustible requirements listed by the vent manufacturers instructions and all clearance to combustibles listed in this manual.

Check with your local building code agency before you begin your installation. Be sure local codes do not supersede UL specifications and always obtain the required permit so that insurance protection benefits cannot be unexpectedly cancelled. If any assistance is required during installation, please contact your dealer.

We recommend that a qualified building inspector and your insurance company representative review your plans before and after the installation.

Be sure to provide a source of fresh air to the room or directly to the appliance. Make-up air is needed to replace what the chimney draws away through the appliance.




 CAUTION
<ul style="list-style-type: none">• DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVICING ANOTHER APPLIANCE.• DO NOT CONNECT TO ANY FORCED AIR DISTRIBUTION DUCT OR SYSTEM.

B. Fire Safety

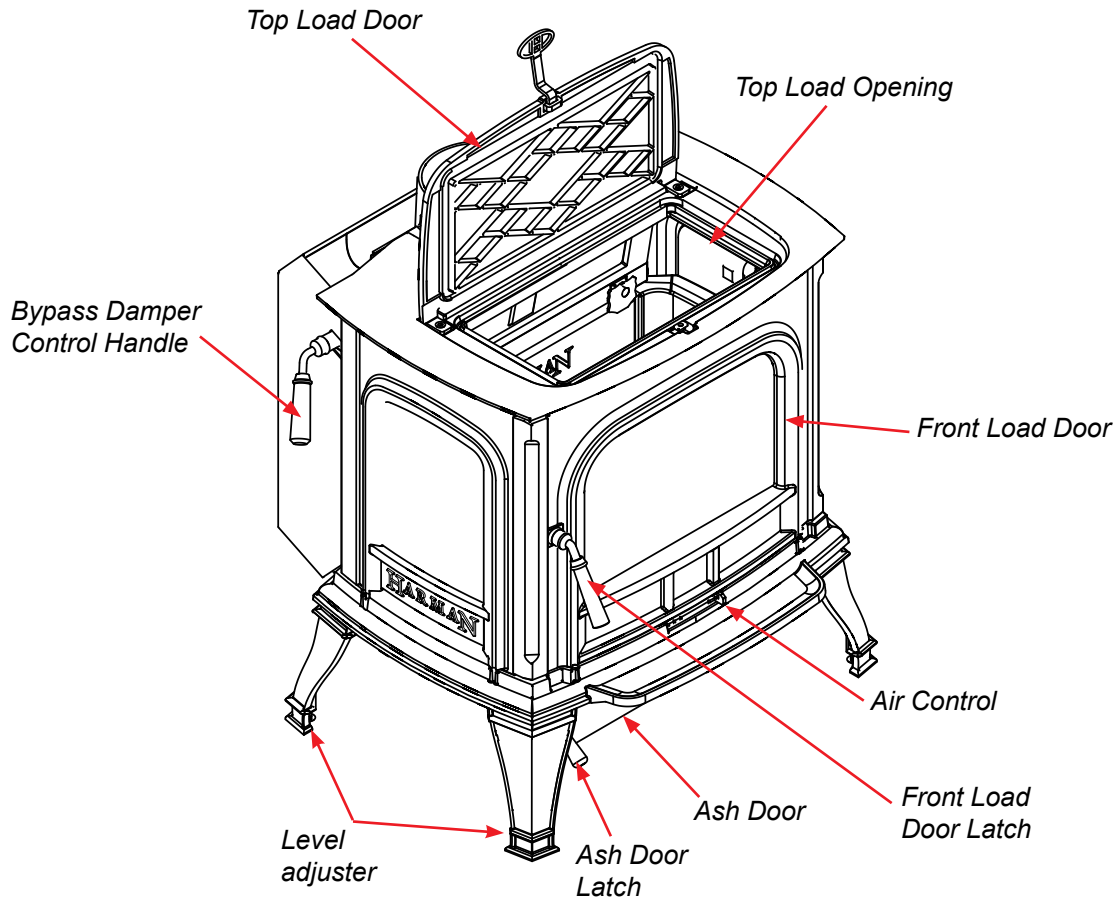
Maintain the designated clearances to combustibles. Insulation must not touch the chimney. You must maintain the designated air space around the chimney. This space around a chimney is necessary to allow natural heat removal from the area. Insulation in this space will cause a heat buildup, which may ignite wood framing. **NOTE: Clearances may only be reduced by means approved by the regulatory authority having jurisdiction.**

To provide reasonable fire safety, the following should be given serious consideration:

1. Install at least one smoke detector on each floor of your home. Detectors should be located away from the heating appliance and close to sleeping areas. Follow the smoke detector manufacturer's placement and installation instructions, and be sure to maintain regularly.
2. A conveniently located Class A fire extinguisher to contend with small fires resulting from burning embers.
3. A practiced evacuation plan, consisting of at least two escape routes.
4. A plan to deal with a chimney fire as follows:
In the event of a chimney fire:
 - a. Evacuate the house immediately.
 - b. Notify Fire Department.
 - c. Never apply water to a suspected chimney fire. Serious damage could occur.

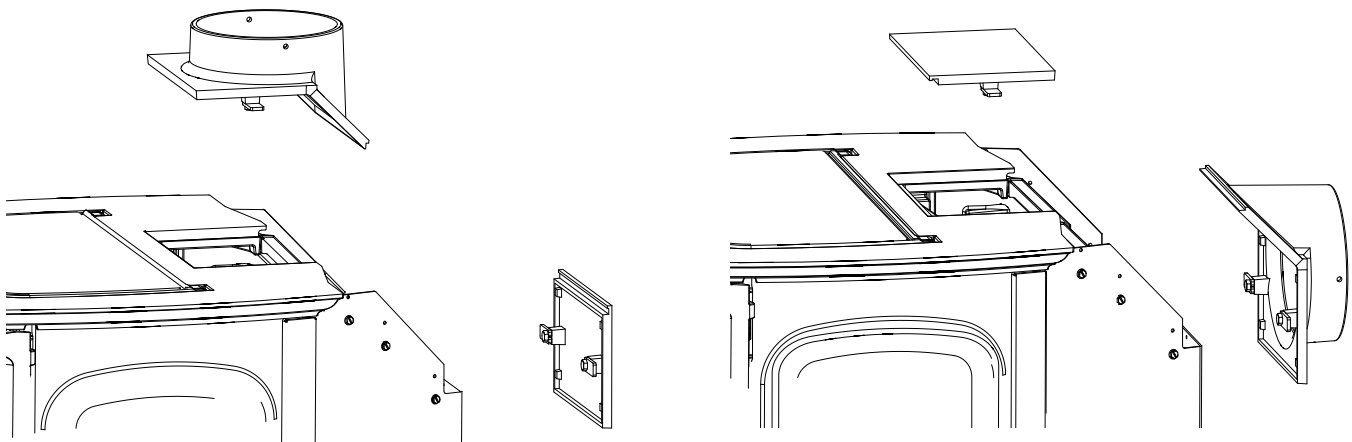
 WARNING	
 	FIRE HAZARD <ul style="list-style-type: none">• DO NOT OPERATE APPLIANCE BEFORE READING AND UNDERSTANDING THE OPERATING INSTRUCTIONS.• FAILURE TO OPERATE PROPERLY MAY CAUSE A HOUSE FIRE.

C. Component Locations



D. Flue Direction Conversion

The Oakleaf features an adjustable flue collar for rear or top exit. Follow these instructions for changing the direction. First, remove the upper rear heat shield by removing 8 tek screws that secure it. Reaching upward through the firebox and the open bypass damper, loosen the retainer bolts on each of the flue collar and the cast iron plate. With the bolts loosened, turn the retainer to allow the piece to come free of the stove body. Reposition the flue collar and the cast iron plate and secure them with the retainers by tightening the bolts. You will now need to install a different upper rear heat shield. (See page 23).



E. Pre- Use Check List

1.	Place the appliance in a location near the final installation and follow the procedures below:
2.	Open the appliance and remove all articles packed inside. Inspect all items for shipping damage. Notify dealer of any missing or damaged goods.
3.	All safety warnings have been read and followed precisely.
4.	This Owner's Manual has been read in it's entirety.
5.	Floor protection requirements have been read and followed.
6.	The flue connector has been installed in accordance with the instructions herein.
7.	The proper clearances from the appliance and chimney connector to combustibles have been met.
8.	The masonry chimney has been cleaned and inspected by a professional, or the factory built metal chimney is installed according to the manufacturers instructions.
9.	The chimney meets the minimum height requirements.
10.	All labels and hang tags have been removed from the glass.
11.	All plated surfaces have been wiped clean, if applicable.
12.	The optional air distribution blower has been installed properly.
13.	A properly grounded electrical receptacle is available within reach of the blower's power cord (if installed).

WARNING



INSPECT APPLIANCE AND COMPONENTS FOR DAMAGE. DAMAGED PARTS MAY IMPAIR SAFE OPERATION.

- DO NOT INSTALL DAMAGED COMPONENTS.
- DO NOT INSTALL INCOMPLETE COMPONENTS.
- DO NOT INSTALL SUBSTITUTE COMPONENTS.

REPORT DAMAGED PARTS TO DEALER.

WARNING

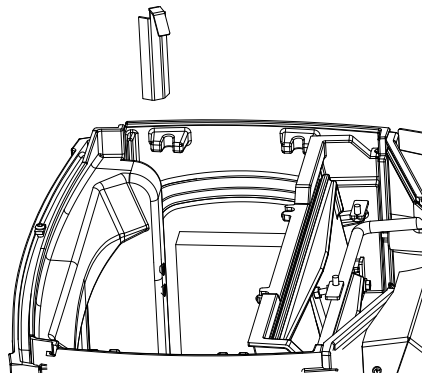


FIRE RISK. HEARTH & HOME TECHNOLOGIES DISCLAIMS ANY RESPONSIBILITY FOR, AND THE WARRANTY WILL BE VOIDED BY, THE FOLLOWING ACTIONS:

- INSTALLATION AND USE OF ANY DAMAGED APPLIANCE.
- MODIFICATION OF THE APPLIANCE.
- INSTALLATION OTHER THAN AS INSTRUCTED BY HEARTH & HOME TECHNOLOGIES.
- INSTALLATION OF PARTS OR COMPONENTS NOT SUPPLIED OR APPROVED BY HEARTH & HOME TECHNOLOGIES.
- OPERATING APPLIANCE WITHOUT THE LEGS ATTACHED.
- OPERATING APPLIANCE WITHOUT FULLY ASSEMBLING ALL COMPONENTS.
- DO NOT OVERFIRE.

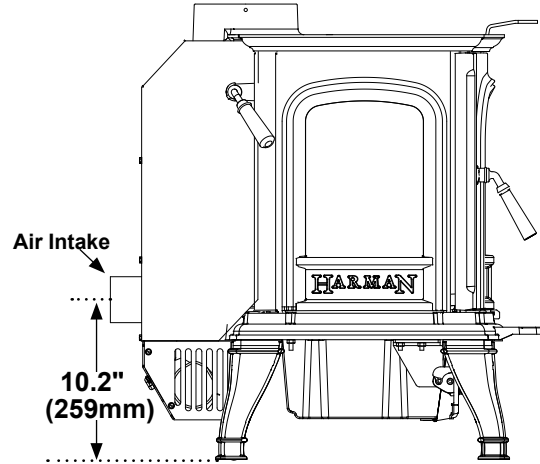
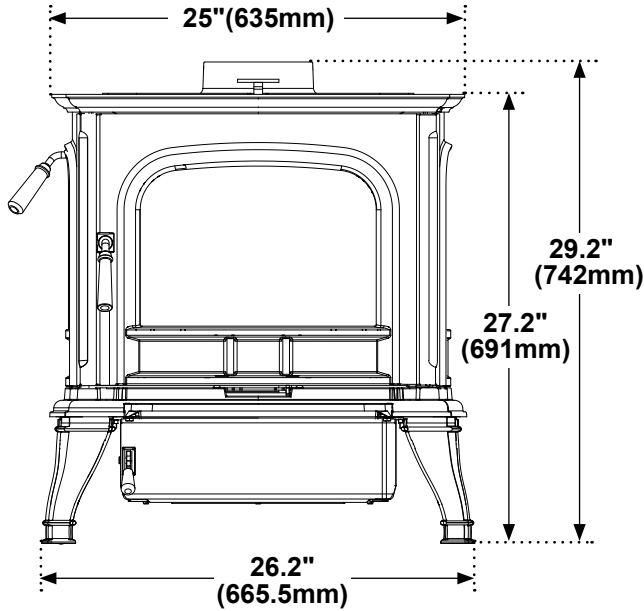
OR ANY SUCH ACTION THAT MAY CAUSE A FIRE HAZARD.

There are two brick clips located in the Owner's manual bag. With the bricks in place, install the clips in the front corners as shown. The long portion of the clip will fit between the brick and the wall of the stove, with the short hook over-hanging to the inside of the firebox.



4 Dimensions & Clearances

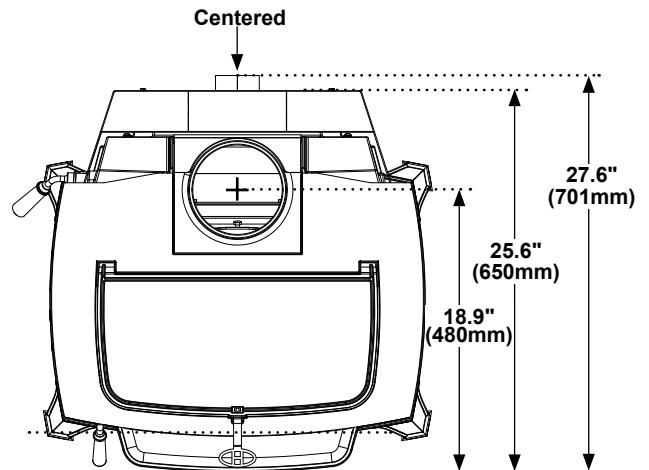
A. Appliance Dimensions



When configured for rear flue; Floor to center of flue measures 23.5" (597mm)

NOTICE: When using rear flue configuration, a new upper rear heat shield, #1-00-797066 must be installed in place of the existing shield.

- Weight.....430 lbs
- Flue Size.....6 inch
- Log Length Recommended.....18"
- Average Emissions.....2.2 Grams Per Hr.
- Outside Air size.....4.5 inch I.D.



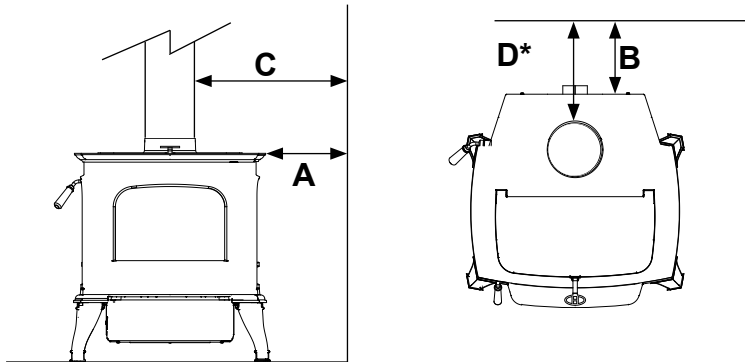
The Harman Oakleaf meets the U.S. Environmental Protection Agency's emission limits for wood heaters sold after July 1, 1990.

B. Clearances To Combustibles

CLEARANCE TO COMBUSTIBLES: Vertical Venting Configuration

Location		
A	Unit to Side Wall	17" / 432 mm
B	Unit to Back Wall	14" / 356 mm
C	Vent Pipe to Side Wall	26.75" / 679 mm
D*	Vent Pipe to Back Wall	*17.5" / 444 mm

Pipe clearance may be reduced using double wall or insulated connector pipe, provided that you adhere to the specified clearances from the stove itself. Follow pipe manufacturer's guidelines.



* NFPA 211 specifies 18" clearance to single wall connector pipe. This lower clearance is based on actual safety test conditions.

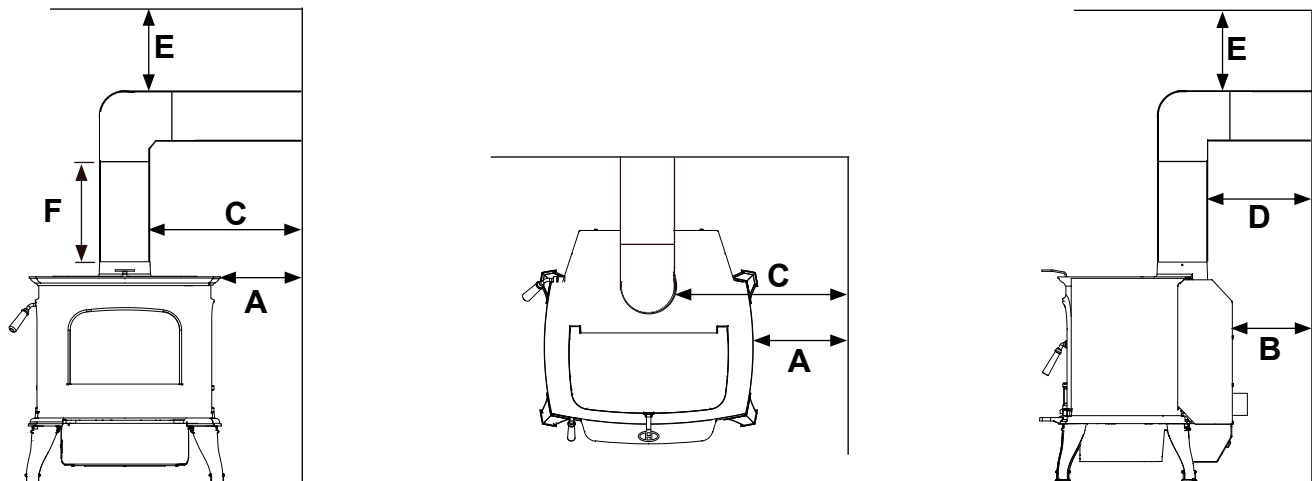
For clearance reduction methods, refer to NFPA 211 or Local Codes

CLEARANCE TO COMBUSTIBLES: Vertical Vent, Horizontal Exit

Location		
A	Unit to Side Wall	16" / 407 mm
B	Unit to Back Wall	13" / 330 mm
C	Vent Pipe to Side Wall	25.25" / 641 mm
D*	Vent Pipe to Back Wall	*17" / 432 mm
E*	Vent Pipe to Ceiling	*16" / 407 mm
F	Minimum Vertical	0" / 0 mm

Pipe clearance may be reduced using double wall or insulated connector pipe, provided that you adhere to the specified clearances from the stove itself. Follow pipe manufacturer's guidelines.

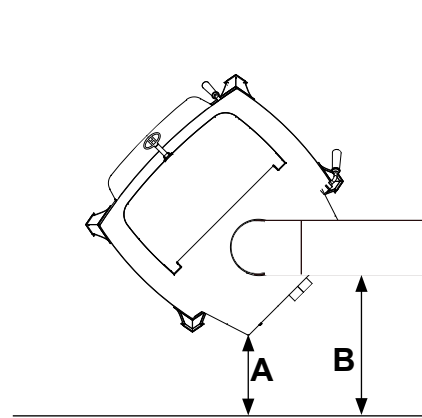
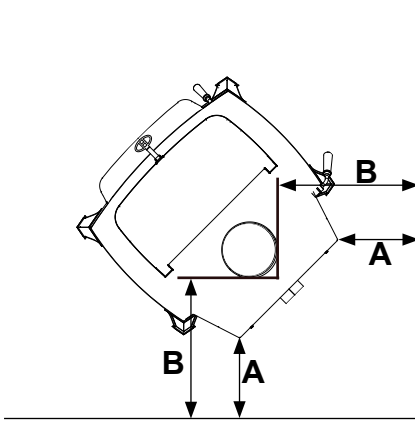
* NFPA 211 specifies 18" clearance to single wall connector pipe. This lower clearance is based on actual safety test conditions.



CLEARANCE TO COMBUSTIBLES: Corner Installation, Vertical Vent

Pipe clearance may be reduced using double wall or insulated connector pipe, provided that you adhere to the specified clearances from the stove itself. Follow pipe manufacturer's guidelines.

Location		
A	Shield Corner to Wall	14" / 356 mm
B	Vent Pipe to Wall	21.75" / 552 mm



CLEARANCE TO COMBUSTIBLES: Corner Installation Vertical Vent, Horizontal Exit

Location		
A	Shield Corner to Wall	14" / 356 mm
B	Vent Pipe to Wall	21.75" / 552 mm

***For clearance reduction methods, refer to NFPA 211 or Local Codes**

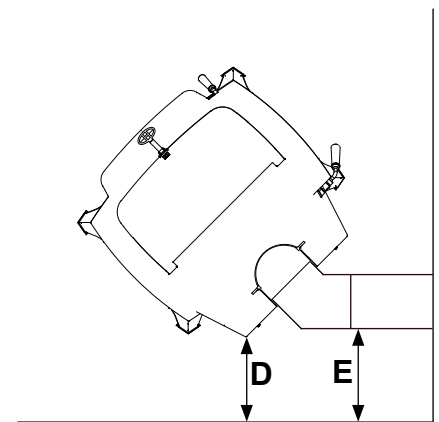
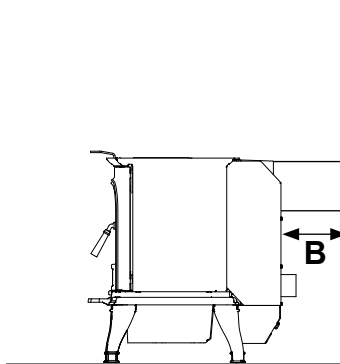
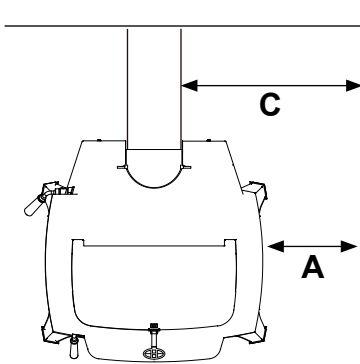
CLEARANCE TO COMBUSTIBLES: Horizontal Venting Configuration

Location		
A	Unit to Side Wall	17" / 432 mm
B	Unit to Back Wall	13" / 330 mm
C	Vent Pipe to Side Wall	26.5" / 673 mm

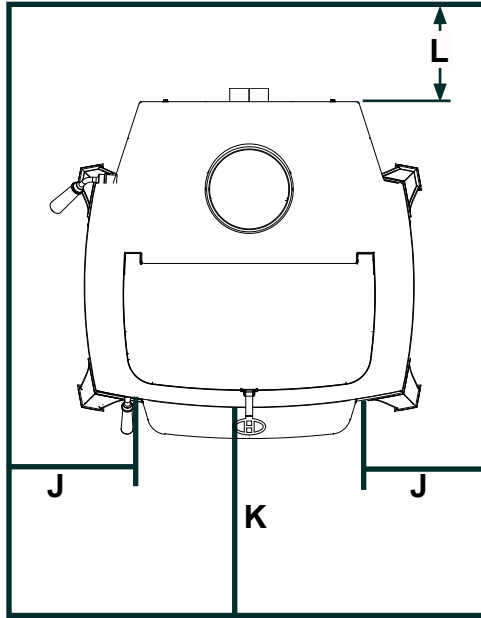
Corner Installation		
D	Shield Corner to Wall	14" / 356 mm
E	NFPA 211 specifies clearance of	18" / 457 mm

(Although vent clearance may be reduced using double-wall pipe, D must be followed)

NOTICE: When using rear flue configuration, a new upper rear heat shield, #1-00-797066 must be installed in place of the existing shield.



C. Floor Protection Requirements



DANGER: The appliance legs may not be removed for installation.

Minimum Size floor protection (USA) is 48" Deep By 32.5" Wide.

Floor Protection Requirements		Inches	Millimeters
J	Sides- USA /CANADA *	8	203
K	Front- USA /CANADA *	18	457
L	Rear- USA	8	203
L	Rear- CANADA	Wall	Wall

* Floor protection for the front and sides as measured from the appliance door opening.

Floor Protection Requirements

If the Oakleaf is being installed on a combustible floor, the bottom heat shield (part # 1-00-797058) must be installed along with proper floor protection material. (See page 25). Floor protection must be a minimum 3/8" (9.5mm) thickness of material having an insulating value equal to or better than 0.84k/in. (The lower the k value, the better the protection.)

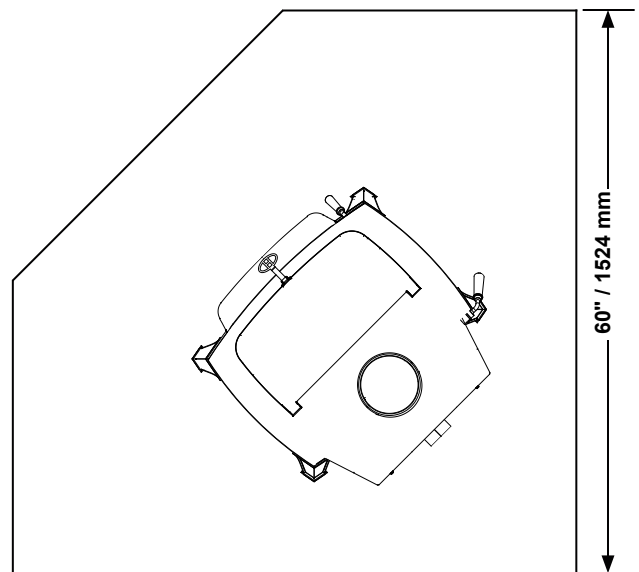
Another method for calculating floor protection is in R value. This requirement would be for an R value of 0.45 or higher. (The higher the R value, the better the protection). *Example- 1 inch of Durock® = 0.52R*

In all installations, the area under and around the stove must be protected from falling ash and live coals. *The area under a horizontal run of chimney connector must also be protected, extending two (2) inches beyond the measurement of the horizontal connector.*

Further guidelines for floor protection are as follows:
In the U.S. the floor protector must be completely under the stove, and extending 16" in front of the door opening, 8" to each side and 8" to the back.

In Canada, the floor protection must extend 18" (457mm) in front of the door opening, 8" (203mm) to each side and extend to the wall behind the stove.

Minimum 60" corner floor protection (USA & CANADA).



5 Chimneys and Venting

A. Draft

Draft is widely misunderstood. It is important that you, the stove operator, realize that draft is a variable *effect*, not a given quantity. Stoves and chimneys do not *have* draft, yet draft is the key to your stove's performance.

Draft is a *force*, produced by an operating stove and the chimney to which it is attached. It is created by hot gases rising up the chimney, creating a pressure difference between the inside of your home and the outside air. It continually moves fresh combustion air into the stove, and hot exhaust gases out of the stove; without this constant flow, the fire will go out.

Other factors, such as barometric pressure, winds, the airtightness of the home, the total inside chimney volume, chimney height and the presence of venting devices such as exhaust fans also play a role in maintaining an adequate draft. Low barometric pressures, super insulated homes and exhaust fans can reduce draft; winds can play havoc with draft; and too large or too small a chimney volume can cause reduced draft due to the excessive cooling or not enough room to vent exhaust gases. Introducing outside air directly to the stove may help remedy a low draft problem. Some signs of inadequate draft are smoking, odor, difficulty in maintaining the fire, and low heat output. Overdraft can be caused by a very tall chimney even if it is the recommended size, and can cause overfiring of your stove. Signs of an overdraft include rapid fuel consumption, inability to slow the fire, and parts of the stove or chimney connector glowing red. It is important that you follow the chimney guidelines in this manual, including size, type, and height to avoid draft problems.

When installed and operated according to this manual, the Oakleaf will produce enough hot gases to keep the chimney warm so that adequate draft is maintained throughout the burn cycle.

B. Chimney Connectors

In general, following these guidelines will ensure compliance with all national and provincial codes; prior to beginning your installation, check with your local building code official to check on additional local regulations which may influence the design and placement of your venting system.

The Harman Oakleaf may be installed with a minimum (.6 mm) 24 gauge chimney connector pipe. The size of the connector should correspond to the size of the flue collar opening. Do not use makeshift compromises. No part of the chimney connector may pass through an attic or roof space, closet or other concealed space, or through a floor or ceiling. Whenever possible, avoid passing the connector through a combustible wall; if you must, use an approved wall pass-through, described later in this section.

The Chimney Connector Shall Not Pass Through an Attic or Roof Space, Closet or Similar Concealed Space, a Floor or Ceiling.

Assemble the connector beginning at the flue collar, with the crimped ends pointing towards the stove (to keep debris or residue inside the system). Each joint, including the one to the stove's flue collar and the one to the chimney itself should be secured with at least three sheet metal screws. Screws may be a maximum of 3 inches apart. A 1-1/4" (30 mm) overlap is required at each joint, including the flue collar attachment. No more than two 90 degree elbows should be used, and the total length of connector should not exceed 10 feet (3 m). All horizontal runs of connector must have a minimum upward slope of 1/4"(6 mm) per foot (20 mm per meter).

The chimney connector diameter should correspond to the size of the flue collar opening. Do not use makeshift compromises. No part of the chimney connector may pass through an attic or roof cemented in place with refractory cement.

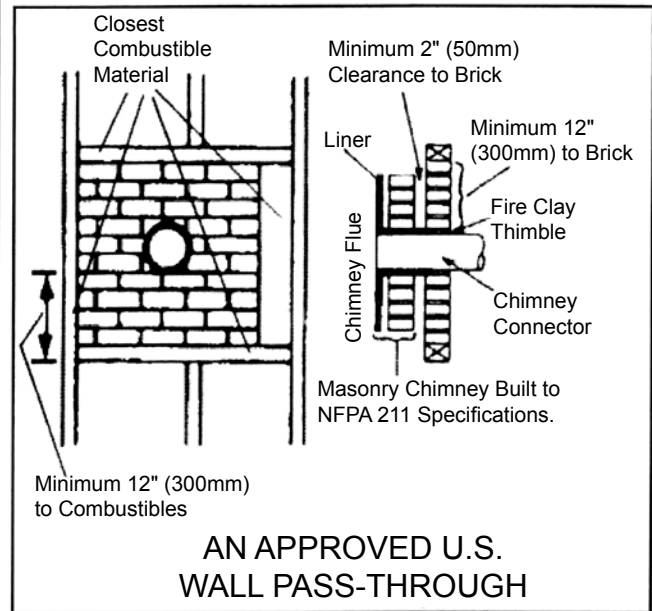
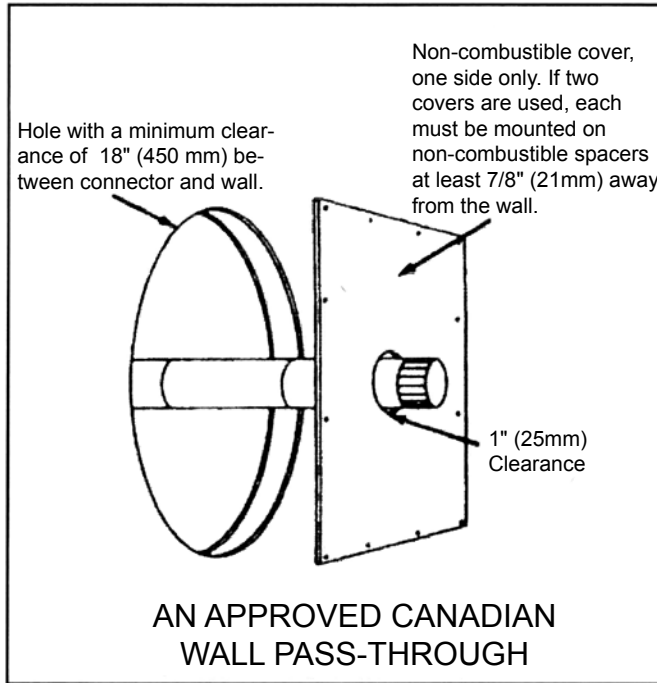
C. Wall Pass-thrus

Depending on your local building codes, and the pertinent provincial or national codes, there are several choices for passing the chimney connector safely through a wall. Before beginning your installation, contact local officials, and also the chimney connector and chimney manufacturer for specific requirements.

Canada. Three methods are approved by the Canadian Standards Association. The diagram on the next page shows one method requiring an 18"(450 mm) air space between the connector and the wall. It allows use of one or two covers as described in the diagram. The two other methods are described in detail in the current issue of CAN/CSA B365, the national standard.

United States In the U.S., the national code is NFPA 211. While many localities adopt this standard, be sure to check with local authorities before beginning your installation.

The NFPA (National Fire Protection Agency) permits four methods for passing through a combustible wall. A commonly used method to pass through a wall directly to a masonry chimney is to clear a minimum 12"(300 mm) around the entire chimney connector, and fill it with brick masonry which is at least 3.5"(90 mm) thick. A fireclay liner, minimum 3/8" (9 mm) wall thickness must run through the brick wall to the chimney liner (but not beyond the inner surface of the liner). It must be cemented in place with refractory cement. This method is illustrated on the next page. For details on the other three options, refer to the most recent edition of the NFPA 211 code.



D. The Chimney

This unit must be installed into a chimney approved for use with solid-fuel appliances. In the U.S., it must be connected to (1) a prefabricated chimney complying with the requirements for Type HT chimneys in the Standard for Chimneys, Factory-Built, Residential Type and Building Heating Appliances, UL 103, or (2) a code-approved masonry chimney with a flue liner.

In Canada, this unit is listed for use with prefabricated chimneys tested and listed to the high temperature (650 degrees C) chimney standard, ULC S-629, or with a code approved masonry chimney.

For mobile homes, (US only) it must only be installed with a factory built stainless steel chimney. The chimney system should include all required installation components, such as vapor barriers and roof flashing, as tested for use in mobile homes.

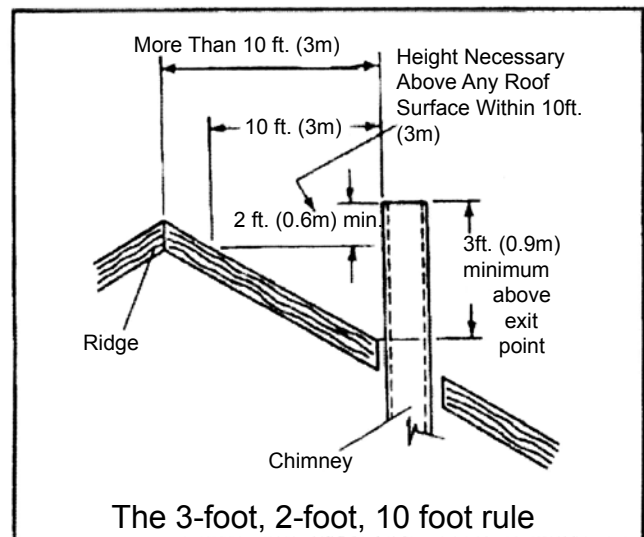
The minimum recommended height for any chimney is 16 ft. (4.8 m) above flue collar height. For non-mobile home installations, a round flue (either masonry or approved prefabricated), of either 6" (150 mm), 7" (180 mm) or 8" (200 mm) may be used. For square or rectangular masonry chimneys, nominal sizes of 8" x 8" or 7" x 12" (200mm x 200 mm, 180 mm x 300 mm) may be used.

Codes require that solid-fuel chimneys extend 3 ft. (0.9 m) above the highest point at which they exit from the roof. Then, the chimney must extend 2 ft. (0.6 m) above the highest point within a 10 ft (3 m) radius. Thus, the 3 foot, 2 foot, 10 foot rule:

- 3ft.** - Above roof exit point
- 2ft.** - Higher than anything within-
- 10ft.** of the chimney.

Do not connect this unit to a chimney flue servicing another appliance.

NOTE: The restriction of not venting more than one appliance to the same flue applies to the U.S. specifically. While it is not recommended that you use the same chimney for more than one appliance, in *Canada* certain exceptions may be made. Be sure to contact your building code inspection official to see if this option is allowed in your area, and to find out the specific requirements for such an installation.



1. Existing Masonry Chimneys

If you plan on using a pre-existing masonry chimney, have it thoroughly inspected and cleaned. Any faults which make the chimney unsafe and unusable must be repaired prior to use. These can include improper height, structural defects, blockages, inadequate clearance to combustibles, unsealed openings into other rooms of the house, signs of creosote or smoke leakage, a loose or absent clean-out door, or absence of a liner.

2. Venting to a Masonry Chimney

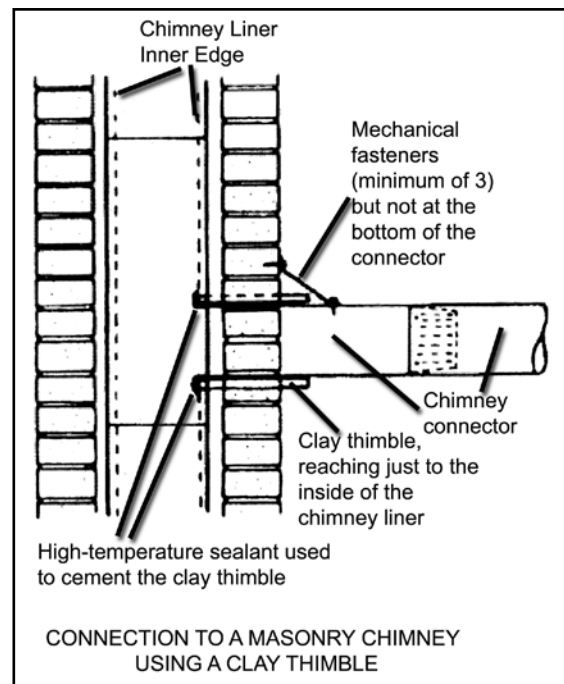
When connecting to a masonry chimney, several provisions are standard. First, whether the chimney connector is vented to the chimney through a thimble or a breech pipe, neither must pass beyond the inner surface of the chimney liner, and both must be firmly cemented in place with refractory cement. (A thimble is a masonry pipe which is inserted through the chimney wall, and is frequently the preferred method; a breech pipe is a piece of steel pipe used the same way.) In Canada, a breech pipe has ridges or protrusions to lock it firmly into the refractory cement. In either case, the chimney connector vents to the chimney through the thimble or breech pipe.

Using a thimble, the connector slides completely inside the masonry to the inner edge of the flue liner, and may be easily removed for chimney and connector inspection. A breech pipe must extend at least 2" (50 mm) into the room, so the connector can be attached with sheetmetal screws.

3. Venting to a Masonry Fireplace Chimney

In some situations, a code compliant chimney originally used for a masonry fireplace may be used. In addition to the requirements found in the previous paragraphs, it is important to be aware that all clearances must be met, including those from the chimney connector to combustibles. Do not forget to include floor protection in your plans. (See Clearances and Floor Protection in this section.) Since many fireplaces have exposed wooden mantels and trim, pay special attention to the clearances necessary to these materials.

If your fireplace chimney is behind a combustible wall, you must use an approved wall pass-through system to gain access to the masonry chimney. The chimney connector must enter the chimney at a place where it is lined, and the fireplace must be made inoperable. For example, you might remove the damper, replacing it with a secure, airtight, noncombustible seal (removable for inspection); this also satisfies the requirement that no room air must be allowed to enter the chimney.



4. Installing to a Prefabricated Chimney

When venting using a prefabricated chimney, be sure to contact local building code authorities, and to follow the manufacturer's instructions *exactly*. Use only the manufacturer's parts; do not use makeshift installation techniques. All prefabricated chimneys must be tested to either the U.S. or Canadian high-temperature standards, UL 103 or ULC S629.

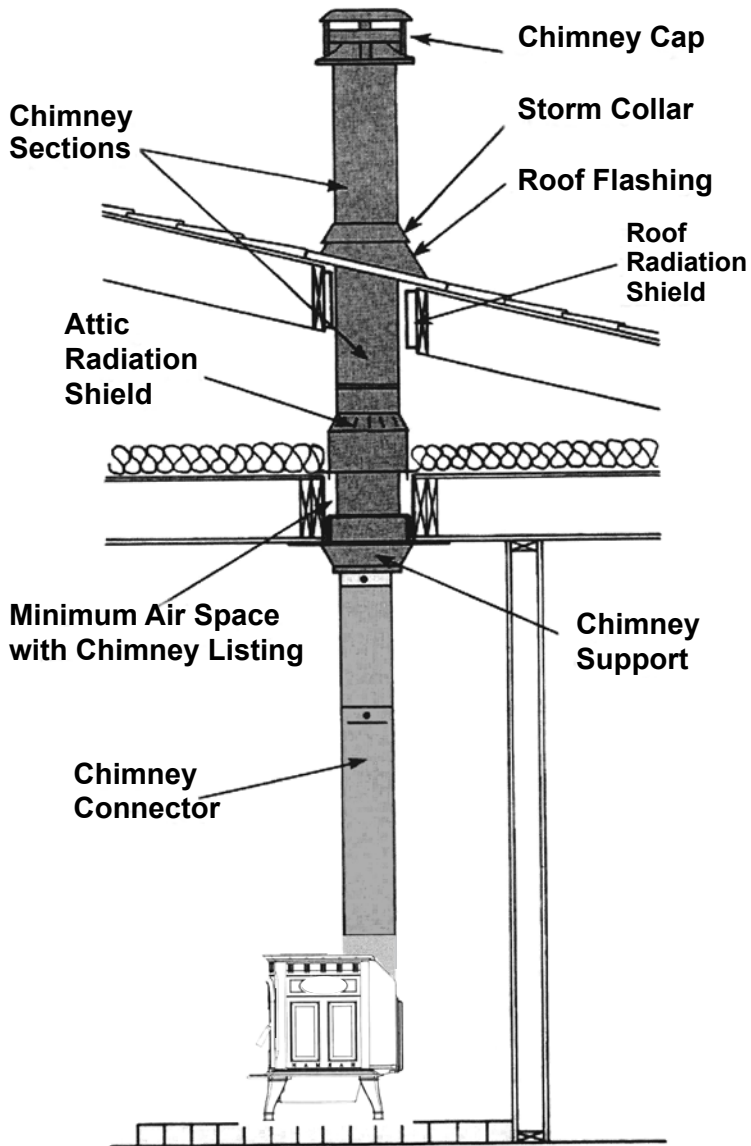
5. Other Considerations

Do not burn any fuel other than dry cordwood. Never use highly volatile substances in your stove, such as gasoline, which could cause an explosion.

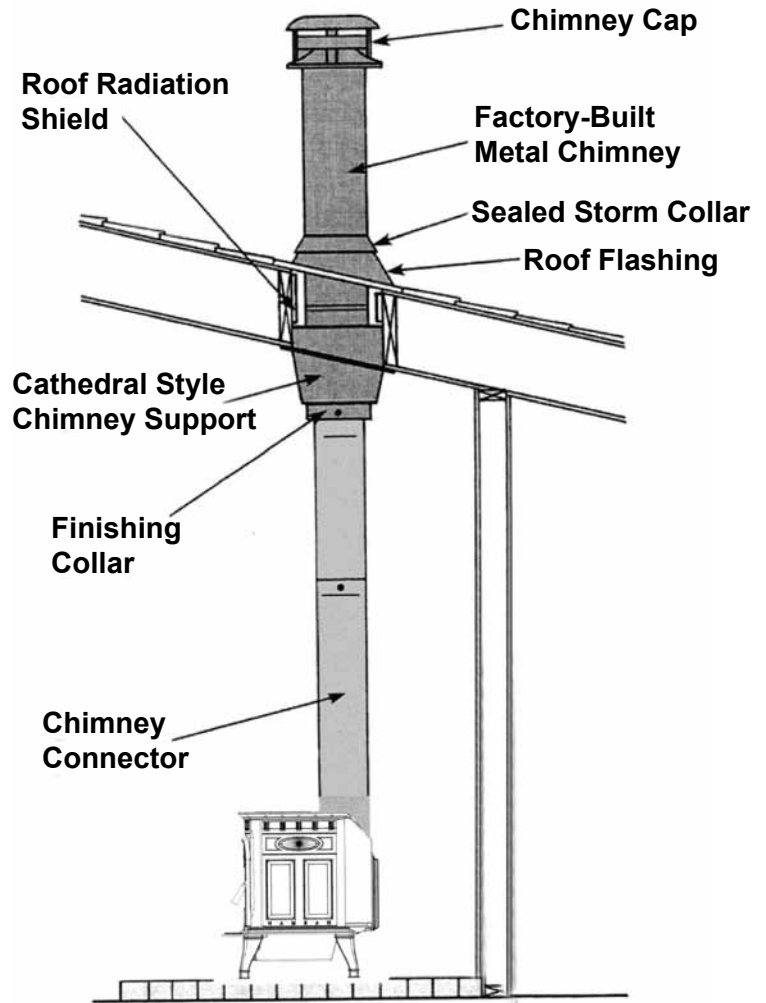
When solid fuels are burned completely, they produce water and carbon dioxide. However, in long slow burns, a substantial amount of carbon monoxide may be produced. If allowed to build up, carbon monoxide (which is odorless) can prove fatally poisonous. Proper ventilation and draft will prevent this from happening. If you smell smoke, thoroughly ventilate your dwelling, and contact your dealer for service.

Other causes of poor ventilation or draft are icing, exhaust fans, a blocked outside air inlet, and room air starvation. If your stove is sluggish and you get occasional odor, check these possibilities and increase the air flow in your home.

**Standard Ceiling Installation with
Factory Built Chimney**

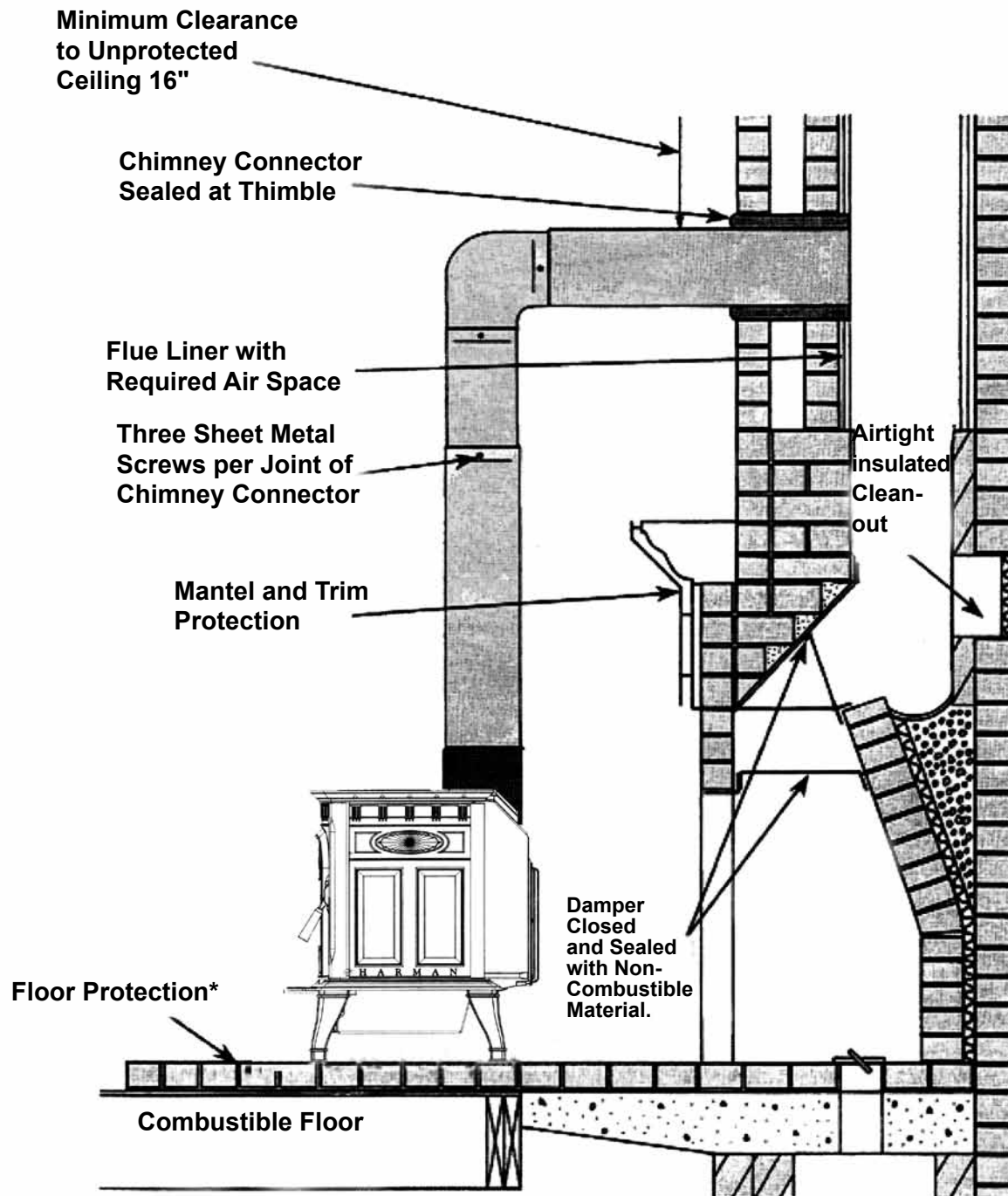


**Cathedral Ceiling Installation with
Factory Built Chimney**



The Chimney Connector Shall Not Pass Through an Attic or Roof Space, Closet or Similar Concealed Space, a Floor or Ceiling.

Chimney Breach Fireplace Conversion with Non-Combustible Wall



* Floor Protection in Accordance with Solid Fuel Appliance Listing

The Chimney Connector Shall Not Pass Through an Attic or Roof Space, Closet or Similar Concealed Space, a Floor or Ceiling.

Oakleaf to Flue Fireplace Conversion (Minimum NFPA 211 Liner Connection)

Flue Liner with Required Air Space

Stainless Steel Chimney Connector Must Extend to Flue Liner

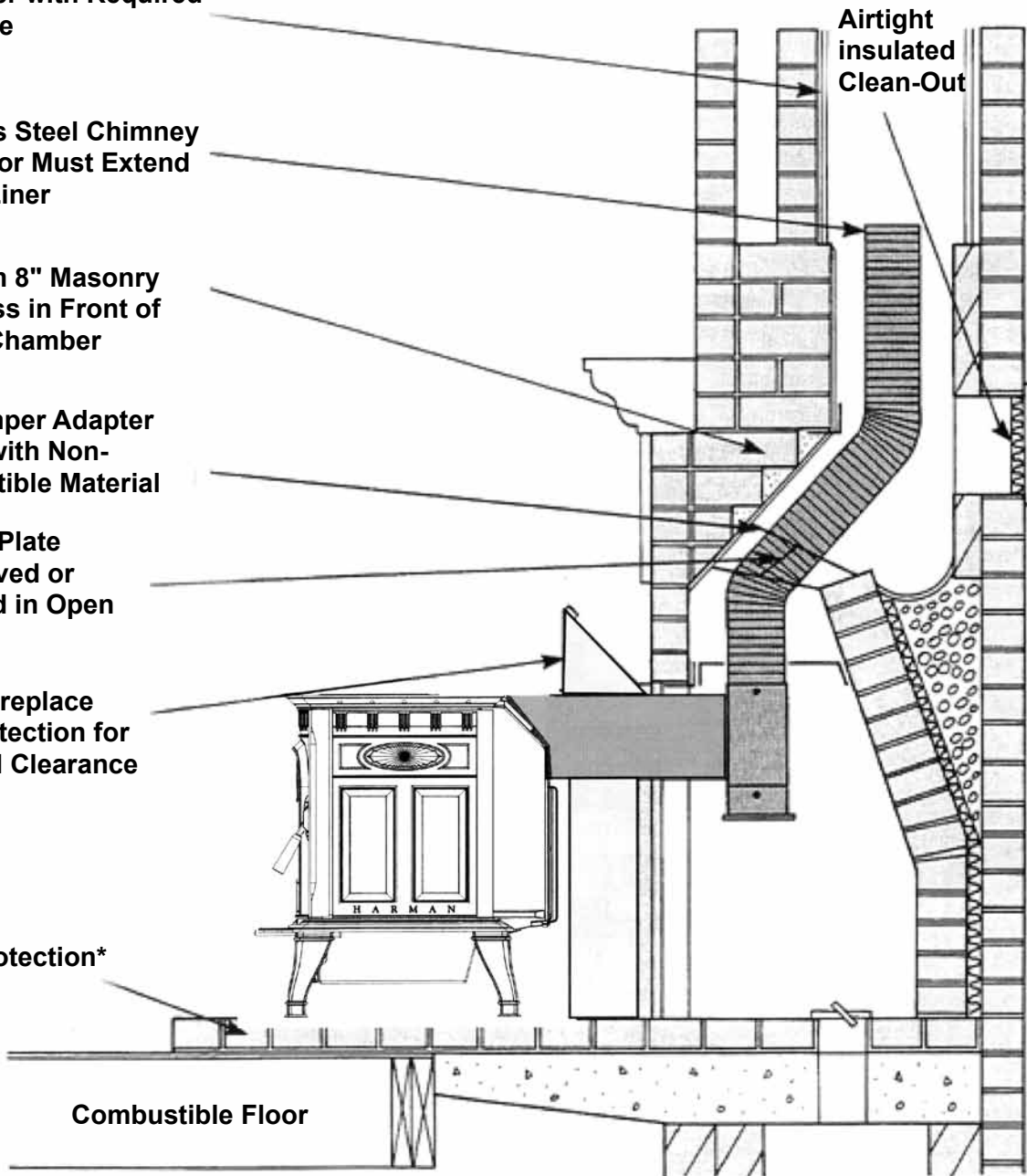
Minimum 8" Masonry Thickness in Front of Smoke Chamber

Use Damper Adapter or Seal with Non-Combustible Material

Damper Plate is Removed or Fastened in Open Position

Listed Fireplace Trim Protection for Reduced Clearance

Floor Protection*



*Floor Protection in Accordance with Solid Fuel Appliance Listing

NOTICE: When using rear flue configuration, a new upper rear heat shield, #1-00-797066 must be installed in place of the existing shield.

The Chimney Connector Shall Not Pass Through an Attic or Roof Space, Closet or Similar Concealed Space, a Floor or Ceiling.

Full Relining Fireplace Conversion: Freestanding Appliance

UL1777 Stainless Steel Liner System or Other approved lining system

Follow liner manufacturer's instructions on insulation and support

UL1777 Insulated Stainless Steel Flex Liner or Other Approved Lining System in Offsets.

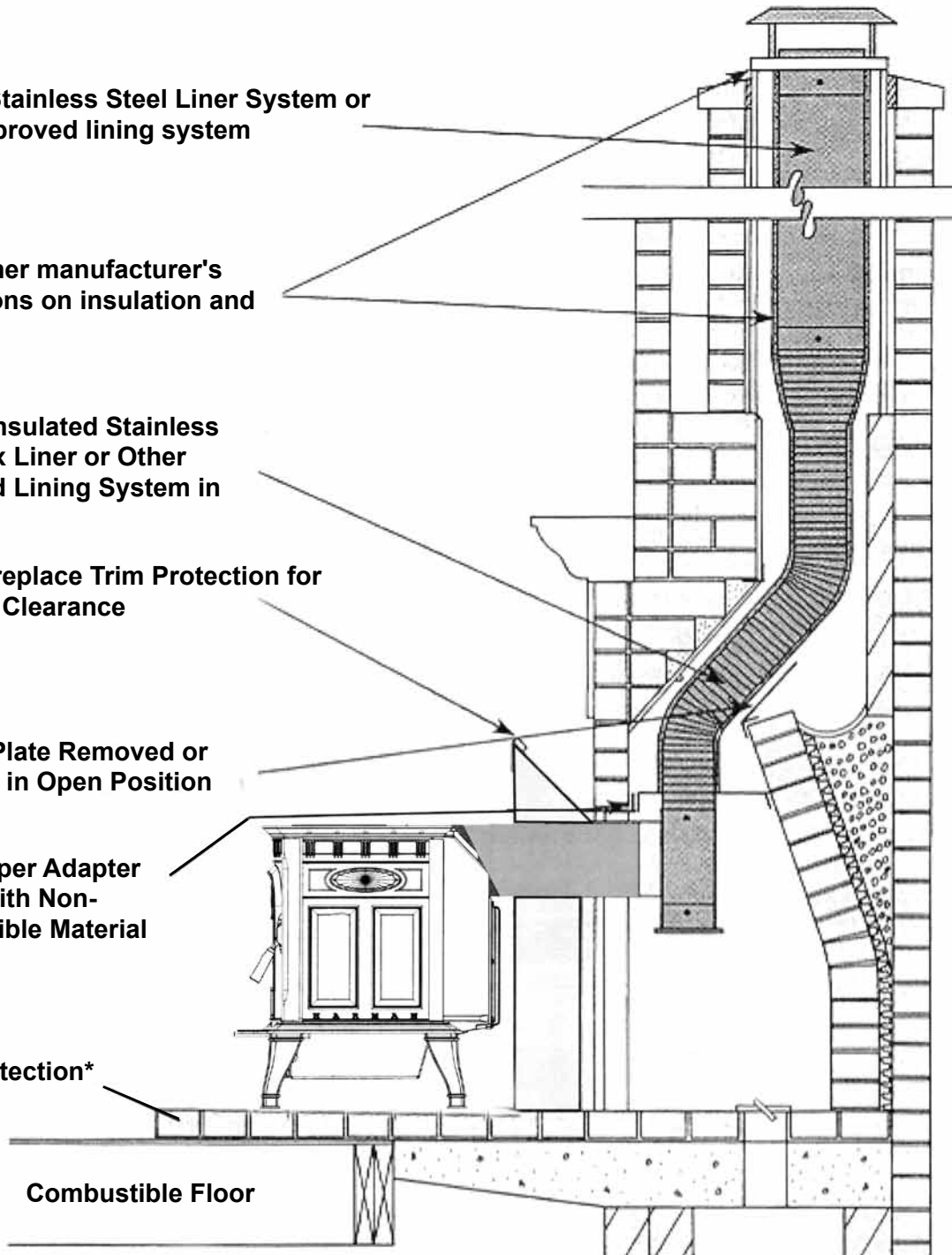
Listed Fireplace Trim Protection for Reduced Clearance

Damper Plate Removed or Fastened in Open Position

Use Damper Adapter or Seal with Non-Combustible Material

Floor Protection*

Combustible Floor



***Floor Protection in Accordance with Solid Fuel Appliance Listing**

NOTICE: When using rear flue configuration, a new upper rear heat shield, #1-00-797066 must be installed in place of the existing shield.

The Chimney Connector Shall Not Pass Through an Attic or Roof Space, Closet or Similar Concealed Space, a Floor or Ceiling.

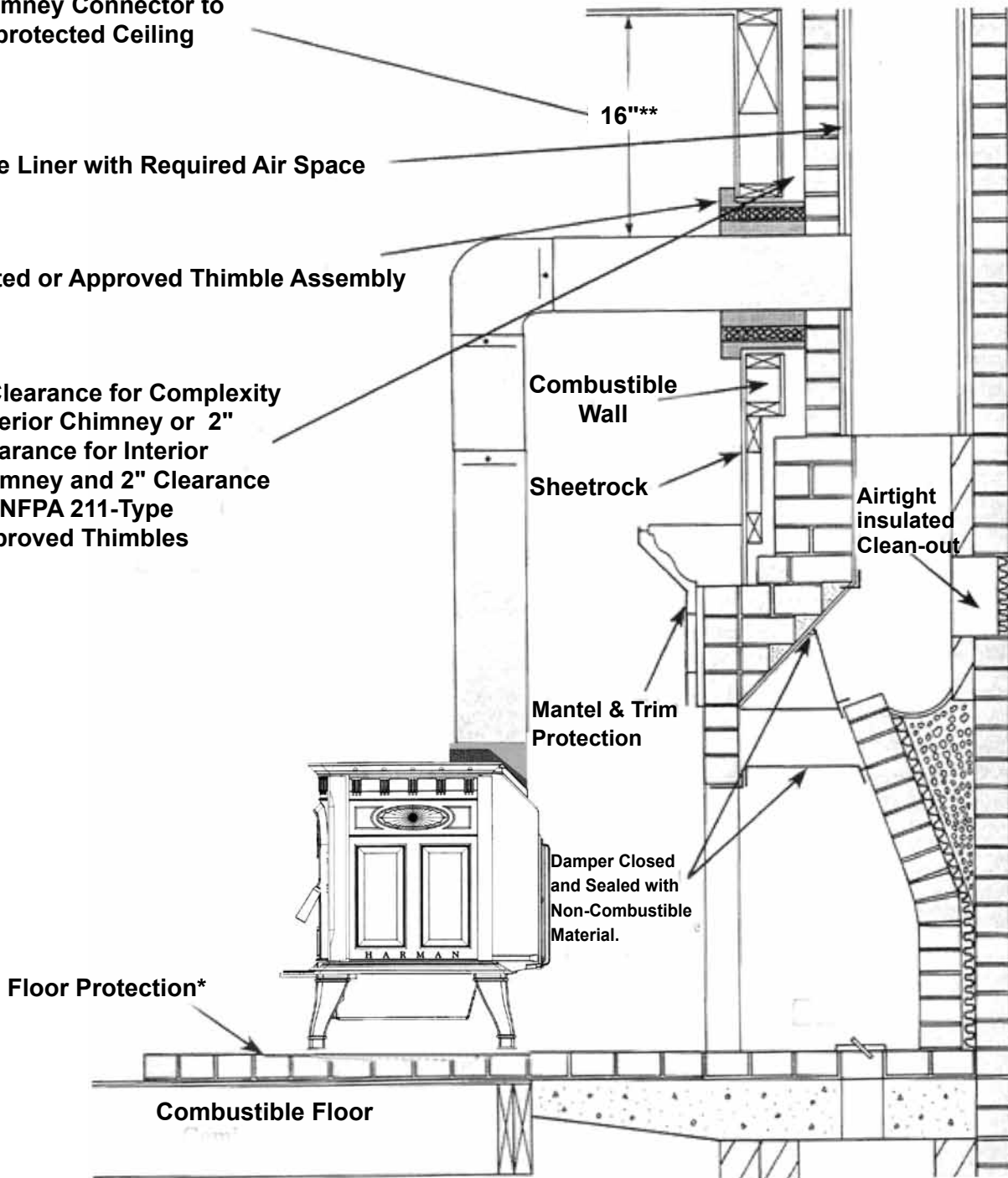
Chimney Breach Fireplace Conversion with Combustible Wall

Minimum Clearance from
 Chimney Connector to
 Unprotected Ceiling

Flue Liner with Required Air Space

Listed or Approved Thimble Assembly

1" Clearance for Complexity
 Exterior Chimney or 2"
 Clearance for Interior
 Chimney and 2" Clearance
 for NFPA 211-Type
 Approved Thimbles



16"***

Combustible
 Wall

Sheetrock

Airtight
 insulated
 Clean-out

Mantel & Trim
 Protection

Damper Closed
 and Sealed with
 Non-Combustible
 Material.

Floor Protection*

Combustible Floor

* Floor Protection in Accordance with Solid Fuel Appliance Listing
 ** Check with your local building codes for clearance.

The Chimney Connector Shall Not Pass Through an Attic or Roof Space, Closet or Similar Concealed Space, a Floor or Ceiling.

6 Mobile Home

A. Mobile Home Installation

Mobile home approval - U.S. only.
DO NOT INSTALL IN A MOBILE HOME IN CANADA.

1. An outside air inlet must be provided for combustion air, and must remain clear of leaves, debris, ice, and/or snow. The outside air path must be unrestricted while the appliance is in operation.
2. The combustion air intake system must be of metal construction. It must permit zero-clearance to combustible materials, and contain a rodent screen.
3. The appliance must be secured to the mobile home structure by bolting it to the floor. There are brackets included, you'll need to secure with the proper length lag bolts.
4. The appliance must be grounded to the metal framing of the mobile home
5. All clearances to combustibles and floor protection requirements must be followed.
6. Follow the vent manufacturer's instructions when installing in a mobile home.
7. Installation shall be in accordance with the Manufactured Home and Safety Standard (HUD) CFR 3280, Part 24
8. The appliance must never be installed in a room designated for sleeping.



WARNING

**INSTALLATION MUST COMPLY WITH
 MANUFACTURED HOME AND SAFETY STANDARD
 (HUD), CFR 3280, PART 24.**



WARNING

NEVER INSTALL IN A ROOM INTENDED FOR SLEEPING.

CAUTION

MAINTAIN STRUCTURAL INTEGRITY OF MOBILE HOME:

- FLOOR, WALL, CEILING AND/OR ROOF.

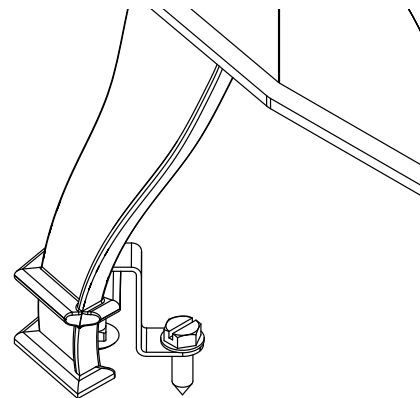
DO NOT CUT THROUGH:

- FLOOR JOIST, WALL STUDS, OR CEILING TRUSSES.
- ANY SUPPORTING MATERIAL THAT WOULD AFFECT THE STRUCTURAL INTEGRITY.

CAUTION

NEVER DRAW OUTSIDE COMBUSTION AIR FROM:

- WALL, FLOOR OR CEILING CAVITY.
- ENCLOSED SPACE SUCH AS AN ATTIC OR GARAGE



This diagram shows the bracket that was used to bolt the stove to the pallet. Use at least two of these brackets for securing the appliance through the floor in a mobile home installation. The bracket will slip over the top of the leveling adjuster. The installer will need to determine and obtain the properly sized lag bolts.

7 Appliance Set-Up

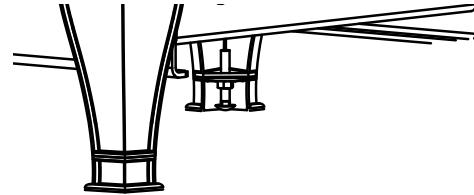
A. Outside Air Attachment

Parts and Supplies Needed: 1 piece of metal flexible pipe, 4" X needed length. 1 Rodent Screen, and aluminum tape. Plus, a trim ring for finishing around the pipe on the inside wall.

1. Determine an appropriate hole location, through the wall. Be sure there are no studs or other supporting members. Also ensure there are no electrical wires or plumbing contained within the wall.
2. Make the hole through the exterior wall using a hole saw or reciprocating saw. You'll want the hole to be just slightly larger than the metal flex pipe.
3. Attach the rodent screen to one end of the flex pipe, and insert it through the wall until the back of the screen cover is against the outside surface.
4. Hold the flex pipe in place to make an accurate determination of the length needed. Cut the flex pipe to length.
5. Slide the trim ring onto the flex for the inside wall portion.
6. Slide the other end of the metal intake flex pipe into the stub on the rear of the Oakleaf and secure it with aluminum tape. This air intake will supply outside air for the secondary combustion within the FireDome.
7. Secure the trim ring in place for finishing the inside wall area.
8. Seal around the rodent screen on the exterior wall, using silicone caulking.

B. Leveling the Appliance

To adjust the leveling bolts, you must first loosen the locking nut. Turn the leveling bolt to the desired position, and tighten the locking nut against the cast iron leg.



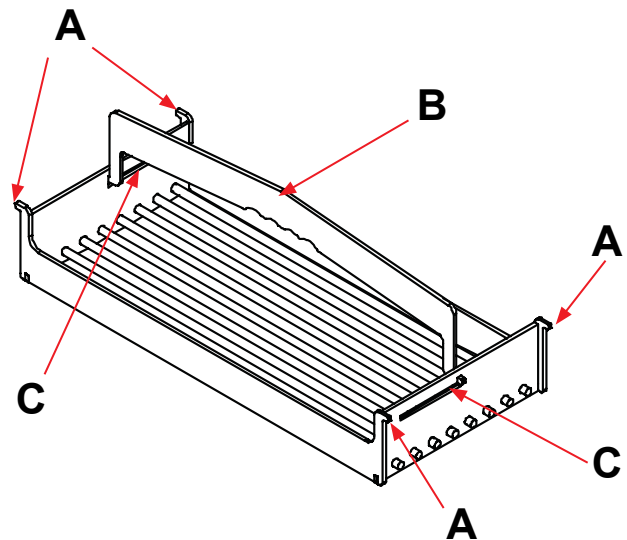
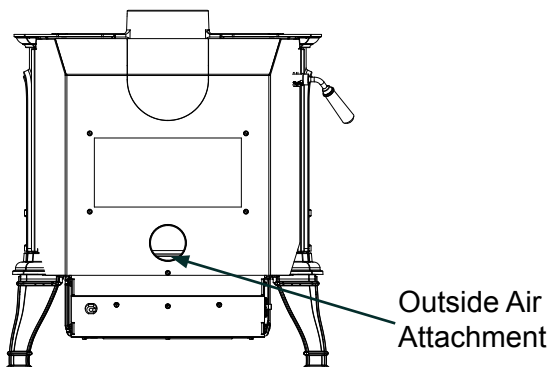
C. Optional Cooking Grill

The optional cooking grill #1-00-08121 installs easily in the top load opening of the Oakleaf. The grill handle (B) fits in the slots (C) on each side. To remove the handle, lower and turn. When installed, the grill hangs in the opening by the hooks (A). When grilling, you'll want to keep the fire size small and the bypass damper in the open position. Depending on the grilling being done, you may get grease dripping on the glass causing it to become dirty and obstructed. When you burn your next hot fire, the glass will likely clean itself.

CAUTION

NEVER DRAW OUTSIDE COMBUSTION AIR FROM:

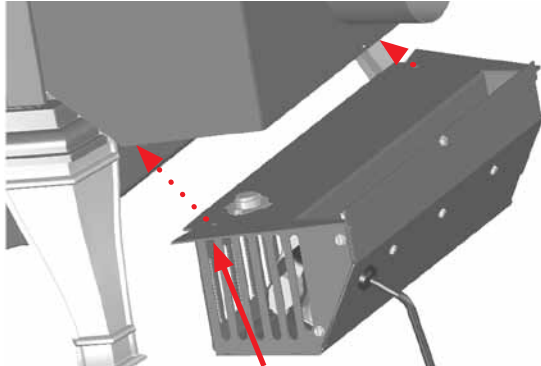
- WALL, FLOOR OR CEILING CAVITY.
- ENCLOSED SPACE SUCH AS AN ATTIC OR GARAGE



D. Optional Blower Installation

The optional blower kit #1-00-797032 installs easily to the rear of the Oakleaf.

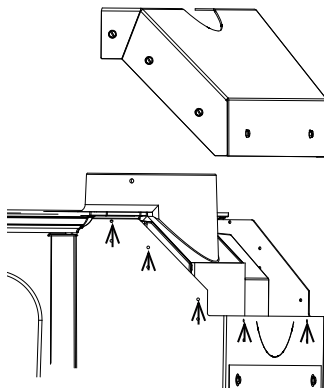
Hold the blower assembly into place and secure it with the two bolts provided. You'll need a 3/8" wrench or socket to tighten the bolts.



Secure blower with one bolt on each end of the mounting plate.

Notice: When installing the optional blower, the upper rear shield must be moved upward to create the air passage.

Loosen the eight screws to remove the rear shield. Raise the shield to the upper set of holes, re-install the shield, and tighten the screws.



WARNING

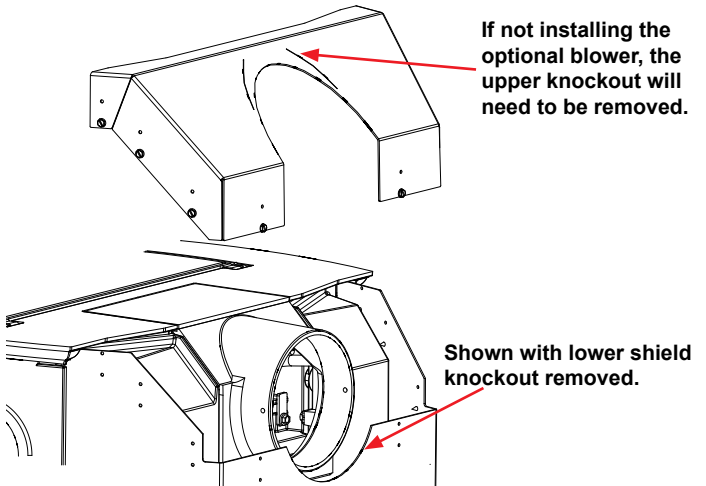
ROUTE POWER CORD AWAY FROM THE APPLIANCE. DO NOT RUN THE CORD UNDER OR IN FRONT OF THE APPLIANCE.

Plug the blower into a properly grounded electrical outlet.

You can turn the blower on at any time using the rocker switch on the rear of the blower housing. Setting the switch to "AUTO" will keep the blower off until there is a significant amount of heat from the stove. In this setting, the blower will also shut off when the stove cools. Keep the blower on low speed or off during low fires. As you get out of the low burn range, the speed can be set wherever desired, or kept off.

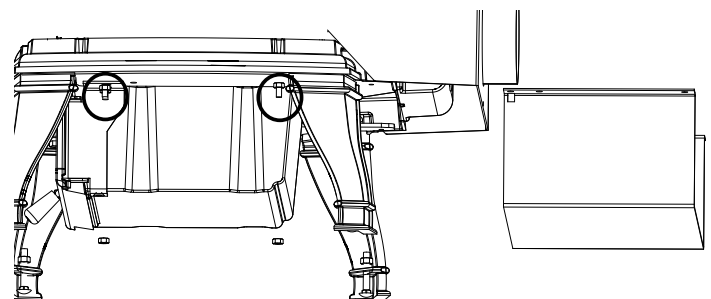
E. Optional Rear-vent Rear Shield

Whenever a rear vent configuration is used, the upper rear heat shield, #1-00-797066 must be purchased and installed, to accommodate the flue collar. There are eight screws that secure the existing shield. You'll need to break away the tabbed portion of the lower shield flue cut-out. Remove the screws from the top-vent shield and install the rear vent shield in its place. Height adjustment for blower use is done the same as with the top-vent shield in place. See *D. Optional Blower Installation* (above) for detailed instructions.



F. Optional Bottom Heat Shield

Part #1-00-797058 **must** be purchased and installed whenever the Oakleaf is installed on a protected combustible floor. The shield installs on four bolts that are protruding downward from the base of the stove body. Slide the shield under the stove from the back, as this is the only way it will fit. Lift into place guiding the bolts through the holes in the shield and secure with the nuts that are included with the shield.



8 Operating Instructions

CAUTION: Approved for use with wood fuel only. The use of any other fuel will void the product warranty and may cause damage to the appliance and/or your home.

WARNING

"NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR "FRESHEN UP " A FIRE IN THIS HEATER. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE HEATER WHILE IN USE".

CAUTION:
ALWAYS WEAR FIRE RETARDANT GLOVES
WHEN OPERATING THE STOVE.

SAFETY NOTICE

IF THIS APPLIANCE IS NOT PROPERLY INSTALLED, OPERATED AND MAINTAINED, A HOUSE FIRE MAY RESULT. FOR YOUR SAFETY, FOLLOW INSTALLATION DIRECTIONS. CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA.

A. Fuel Specifications

Select only **dry, seasoned wood**. Wood for burning should never be exposed to rain or extremely damp conditions. Hardwoods are favored because they are heavier and contain more heating capacity (BTU's) per load than do softwoods. Fuel wood should be split and stored under cover for "seasoning" - at least a year is recommended. Your stove is not an incinerator - do not burn garbage, painted or treated wood, plastic, or other debris.

Keep the area around the stove free from clutter. Keep all combustibles, including fuel, beyond the code-required clearance distance (48" or 1215 mm in the U.S., 1525 mm or 60" in Canada). Never store fuel in front of the stove where it could interfere with door operation, safe loading, and ash removal.

DO NOT BURN GARBAGE OR FLAMMABLE LIQUIDS SUCH AS GASOLINE, NAPHTHA, OR ENGINE OIL.

B. General Operating Information

1. Draft

Before you install and operate your Oakleaf wood stove, please read the entire contents of this manual. Pay particular attention to the explanation of draft and its effect on stove performance in the Installation section. By following the installation and operating guidelines, you will ensure proper draft and gain maximum efficiency and enjoyment from your stove.

DO NOT ALTER THE POSITION OF THE ANDIRONS. BUILDING A FIRE TOO CLOSE TO THE GLASS MAY CAUSE DAMAGE TO THE GLASS, CREATING A SERIOUS RISK OF FIRE AND PROPERTY DAMAGE.

2. Doors

Your stove has a large glass-paneled door for loading and fire viewing, a separate smaller door for removing ashes and a top loading door.

Front Door

Before opening, always check for wood, embers, or ash that may be ready to fall out of the door.

To open the glass door, open the bypass damper first, then turn the handle clockwise and pull out; to close the door, push the door closed with the handle in the open position, then turn, counter-clockwise, to engage the latch.

Ash Door

To open the ash door, lift up the handle and pull out. Close the door by pushing in and pushing the handle all the way down.

Top Load Door

To open the top load door, open the bypass damper and then lift to open the top load door.

All doors must be closed while the stove is in normal operation, and the gaskets routinely examined for wear and replaced when necessary. Good door seals are important for maintaining control of the stove. Never operate with the ash door open. Operating the stove with the ash door open, or with a door inadequately sealed, could create a serious overfiring condition (discussed later in this section).

The glass used in your Oakleaf is manufactured to exact standards to withstand the high heat of the fire, but like all glass, it must be treated with common sense and care. Never abuse the glass by slamming the door shut or striking the glass with a heavy object. If the glass is broken or damaged, do not operate the stove until it has been replaced

(See instructions in the Maintenance section.)

3. Grates

The Harman Oakleaf's unique grate system consists of one flat bottom grate, and two front andirons. The bottom grate has slots which allow the ash to fall into the ash pan by passing a poker back and forth across the grate. The andirons keep the fuel from coming into direct contact with the glass, and keep hot coals and embers from spilling out while reloading. Never build a fire directly against the glass.

The grates and andirons must remain in place at all times. Do not tamper with or change the configuration of this grate system.

C. The Combustion Process

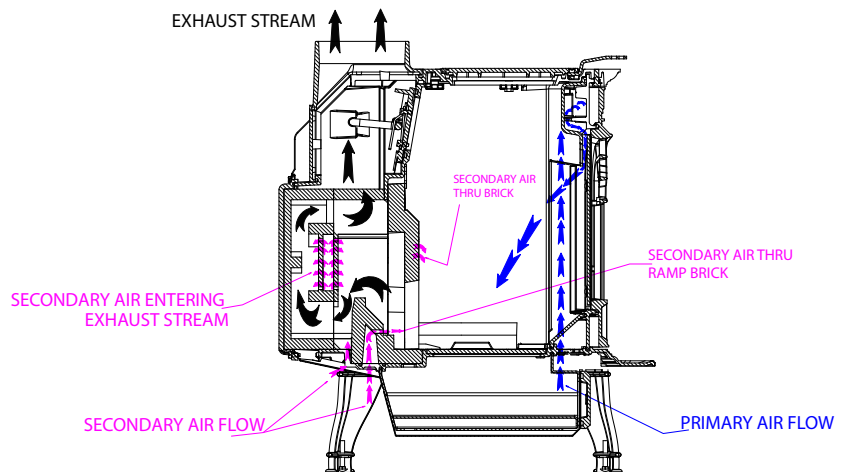
Combustion in the Harman Oakleaf is precisely controlled and is best explained in two parts.

During a wood fire, combustion air enters at the bottom front of the stove where it travels upward through channels at either side of the front door. From the manifold located above the front door, it is directed into the firebox as a sheet of air flowing between the glass and the wood. This concept helps to keep the glass clean, while providing the oxygen needed to sustain burning. This is what is known as "Primary Combustion".

Additional air enters at the bottom rear of the stove body. Some of this air enters through holes in the rear bricks where it is used to revitalize the fire at the rear of the firebox. The remainder is delivered into the "Firedome" combustion package where the "Secondary Combustion", or re-burning of the smoke, occurs.

During combustion, the burning of wood proceeds through several stages. The initial or evaporation stage is where the moisture in the wood is driven off in the form of steam. A second stage is where the volatile gases contained in the wood are released and burned. This represents most of the wood's heating capacity. The final stage is the charcoal stage where the charcoal burns the remaining heat content in the wood fuel. Ash remains after the burning is complete. Within the primary firebox two or more of these stages of combustion are occurring at once.

Always be sure to provide adequate ventilation to the room where the appliance is located, to prevent air starvation. In tight construction, consider installing outside air to the appliance.



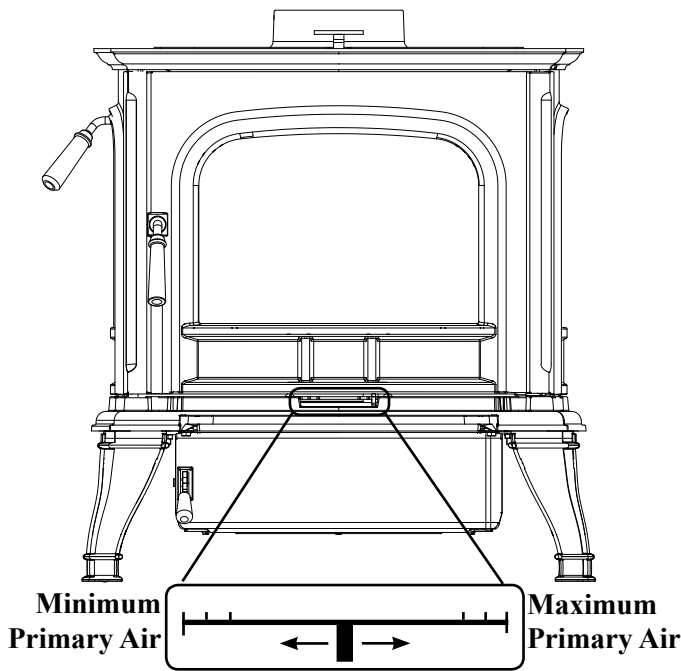
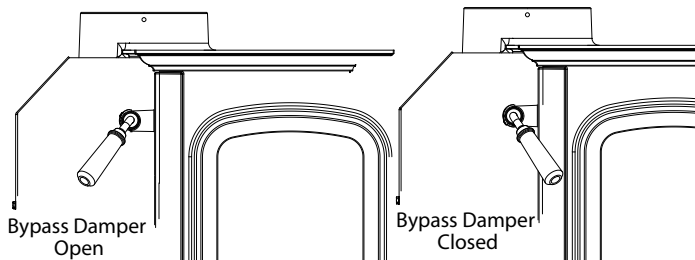
PRIMARY & SECONDARY AIR FLOW

D. User Controls

Two important controls - the damper bypass handle and the air control lever regulate the operation and output of the stove.

To open the top or front loading door, you must open the damper bypass, or smoke will come in the room. In this mode of operation the combustion gases go directly from the main combustion chamber to the flue collar and exit into the chimney.

NOTE: The bypass damper must be open for smokeless loading. Open the bypass damper by turning the handle clockwise while facing handle.



The air control lever is located directly below the load door. Sliding this lever allows you to vary the amount of air to the fire, creating a range of heat outputs. The lowest heat output setting is to the left, and the highest is to the right. The notches are provided as a reference for your comfortable heat settings. Do not, under any circumstances, alter the configuration or operation of the air control lever.

For low burn, slide the air control to the left. For medium burns, use notches 1 to 2. Maximum heat is attained with the air control all the way to the right. Do not burn the stove continuously at the maximum setting. If maximum heat is required day after day, the stove is too small for the area you are trying to heat.

If your wood is not seasoned long enough or is high in moisture content, you may need to adjust the primary air slightly higher to sustain a low burn rate with the cleanest possible exhaust.

E. Before Your First Fire

- Be sure the appliance is installed properly and that all safety requirements have been met. Pay particular attention to the clearances to combustibles, floor protection and the venting instructions.
- Test your smoke detector(s) and CO detector(s) to the specifications of the manufacturer.
- Double check that the ash pan and internal firebox are empty.
- Be sure to read this entire manual.

DO NOT OVERLOAD THE APPLIANCE. DOORS MUST BE CLOSED WHEN IN OPERATION.

F. Building and Maintaining a Fire

Begin with the bypass damper open, and the air control lever at the maximum setting, all the way to the right. Be sure the ash pan door is closed and latched.

Start with a bed of crumpled paper and kindling sized about finger width; place several 1" - 2" (25mm - 50mm) split pieces of dry wood on top of the kindling, followed by a few 2" - 3" (50 mm - 80 mm) split pieces. Lay the wood in a crossed pattern to allow maximum air flow. Ignite the paper and close the loading door(s). Allow this start-up fire to burn for a few minutes, keeping the bypass damper open. Add about five more pieces of wood in the 2 to 3 inch (50 - 80mm) size range, making sure that the fuel bed is all the way across the firebox and staggered to allow airflow. Close the door and allow this loading to burn a few minutes.

Add increasingly larger pieces of wood to the fire until you have a thick bed of hot embers, approximately 2 to 3 inches deep at the back of the grate and at least an inch deep at the front. You must have this charcoal bed established before you close the bypass damper.

Providing you have the charcoal bed described, close the bypass damper by pulling the handle toward the front of the stove.

This will begin the highly efficient mode of operation where the exhaust gases get re-burned in the secondary combustion package. If you cannot achieve a charcoal bed within the first 15 to 20 minutes, your wood is likely too wet, and you may need to burn the fire longer and/or hotter to compensate for the extra energy needed to drive out the moisture. If, after five minutes of burning with the damper closed, smoke is visible coming from the chimney, you probably do not have the proper coal bed. Open the bypass damper and continue with the process until a significant coal bed is formed.

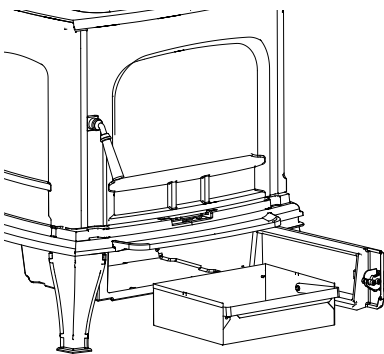
Always remember to open the bypass damper when you are loading, this allows the exhaust gases to pass directly into the flue outlet and reduces the chance of smoke spillage into the room.

Reloading: Once you have prepared and maintained a thick charcoal bed, and the secondary combustion is established, you should be able to reload the stove at any time by simply opening the bypass damper, then the load door, adding fuel and closing the door then the damper. This depends on coal bed size, load size and moisture content of fuel.

Removing Ashes: Before reloading, empty the ash pan (remember to close the ash door while emptying the pan). The ashes should be the coolest at this time. Remove ashes from the fire chamber periodically by raking a poker across the bottom grates.

Excessive ash buildup can prevent proper venting of exhaust gases. Do not allow the ash pan to over-fill. Ash buildup between the ash pan and the bottom of the grate can cause the grate to overheat and wear out prematurely.

The Oakleaf is designed to provide access to the ash pan without the need for opening the main door. Before opening the ash door and removing the ash pan, open the bypass damper. Wearing heavy protective gloves, open the ash door and remove the ash pan by pulling it forward by the handle. Close the ash door and damper bypass before taking the ashes outside for safe disposal.



Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

Never use the ash disposal container for other trash. Wood ash can be added to your garden or compost.

CAUTION

THE STOVE IS HOT WHILE IN OPERATION. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS.

NEVER LEAVE THE STOVE UNATTENDED IF EITHER THE ASH OR LOAD DOOR IS OPEN. OVERFIRING MAY RESULT.

RISK OF EXCESSIVE TEMPERATURES. KEEP ASH DOOR CLOSED DURING FIRING OF THE HEATER.

Avoid overfiring your stove. Overfiring is a potentially hazardous situation which can lead to overheating of combustible materials nearby, damage to the stove, and in extreme cases, cause a fire. Overfiring is caused by: 1. Too much air flowing through the stove too quickly. 2. You may have positioned the primary air control lever too far to the right. 3. Inadvertently leaving the damper open or 4. Not keeping up with routine maintenance, such as checking door gaskets for wear.

Overfiring results in excessive fuel consumption, and may cause parts of the stove or chimney connector to glow red. If you notice signs of overfiring, reduce the air supply to the fire, and review the Maintenance section in this manual.

In the event of a chimney fire, call your local fire department; make sure everyone is safely out of the house. Reduce the air intake of the stove as much as possible using the air control lever; close the bypass damper to further restrict air flow. Do not throw water on the fire; this can cause stove damage and create an even more dangerous situation. Have your chimney professionally cleaned and inspected before resuming burning in your stove.

As you begin to operate your stove at higher temperatures, you will notice a "hot" or unpleasant smell; this is just the paint going through the curing process, and will disappear after a few fires.

9

Service & Maintenance

Solid fuel burning space heaters must be cleaned regularly, as soot, ash and creosote may accumulate.

A. Creosote- Formation and Need For Removal;

When wood is burned slowly, it produces tar and other organic vapors which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire. The chimney and chimney connector should be inspected at least once every two months during the heating season to determine if a creosote buildup has occurred. If creosote has accumulated, it should be removed to reduce the risk of a chimney fire.

If you experience a chimney fire; Close the air control and bypass damper and notify the fire department. Do NOT apply water to the fire, in the firebox or in the chimney. Do not operate the appliance until the chimney and connector have been inspected and approved by a chimney professional.

Do not burn any fuel other than wood, such as charcoal, which can cause increased carbon monoxide production or overfiring. Never use highly volatile substances in your stove, such as gasoline, which could cause an explosion.

When solid fuels are burned completely, they produce water and carbon dioxide. However, in long slow burns, a substantial amount of carbon monoxide may be produced. If allowed to build up, carbon monoxide (which is odorless) can prove fatally poisonous. Proper ventilation and draft will prevent this from happening. If you smell smoke, turn up the air control lever setting, and thoroughly ventilate your dwelling. During future burns, be careful not to overload the stove with fuel, so you will not be tempted to constantly operate at a low air control setting.

Other causes of poor ventilation or draft are icing, exhaust fans, a blocked outside air inlet, and room air starvation. If your stove is sluggish and you get occasional odor, check these possibilities and increase the air flow in your home.

Seasonal cleaning

At least once per year, the stove, venting connectors and chimney should be thoroughly cleaned. If the areas are found to have an excessive build up of ash or creosote, it is recommended to increase the frequency of the cleaning. This will extend the life of the appliance and its components. A vacuum specifically designed for ash is preferred, however a standard shop-style vacuum with a HEPA filter may also work just fine.

During cleaning, caution must be taken not to damage the white / gray colored ceramic combustion package in the rear of the firebox. When using a brush in the chimney or venting connector, the by-pass damper should be placed in the open position to help prevent ash, creosote or other debris from falling down onto and around the combustion package. This also protects the top of the combustion package from tool or brush damage and diverts most of the removed materials into the firebox for easy clean-up and removal. Once the venting system has been cleaned, remove the first section of connector pipe from the appliance flue collar. Carefully vacuum the ash and debris from around the sides and top of the combustion package.

The shoe brick must be removed to allow vacuum access for cleaning the front portion of the combustion package.

Always use caution when refueling or when vacuuming the firebox and combustion package. Some users have damaged their combustion package with vacuum cleaner tools, and fire pokers.

CAUTION: ALWAYS WEAR FIRE-RESISTANT GLOVES TO OPERATE THE STOVE. THE AIR CONTROL IS HOT WHILE IN OPERATION.

B. General Maintenance Procedures

1. Ash Removal

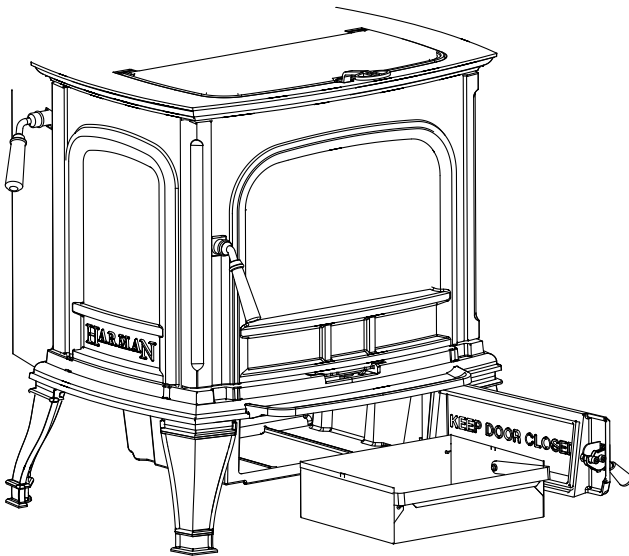
- **Frequency:** As needed / Every day or two
- **By:** User

Wear Leather Gloves To Prevent Skin Burns!

Open the ash removal door by lifting upward on the latch handle, then swing the door open. Pull the ash pan out of the firebox, using the lip on the front of the pan. Once the ash pan is removed from the stove, you can flip the carry handle up for convenience.

If removing ashes while a fire is burning, close and latch the ash door while disposing of the ashes.

DO NOT leave the appliance unattended with the ash door open.



Ashes must be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a non-combustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled. Do not use the ash container for other debris or yard waste.

2. Door Glass

- **Frequency:** As needed / Weekly
- **By:** User

Whenever the view of the fire is obstructed, or weekly, clean the glass using a soft cloth dampened with standard household glass cleaner.

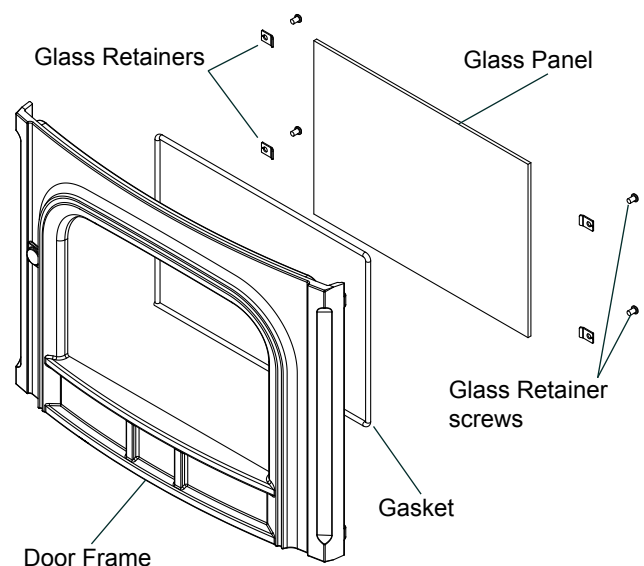
Never spray glass cleaner directly onto hot glass. Apply the cleaner to the cloth then wipe the glass.

Fly-ash allowed to accumulate on the glass may lead to permanent fogging or "crazing" of the glass.

Inspect the glass and sealing gasket. Replace gasket as needed. Do not operate the stove with a broken glass. Replacement glass, which is ceramic glass, should be obtained only through your Harman dealer.

To replace a broken glass; first be sure to carefully remove the broken glass and any remaining shards or pieces. With the door laying on a flat surface, lay the gasketed glass panel onto the door and be sure it is properly fitted into the channel. Lay the glass retainer clips in place near each corner, and secure them using the 3/8" screws. Be sure to tighten each screw equally so you don't create a pressure point on the glass.

CAUTION: NEVER USE ABRASIVE MATERIALS ON THE GLASS.



WARNING: DO NOT ABUSE GLASS BY STRIKING OR SLAMMING THE DOOR CLOSED. THIS TYPE OF BREAKAGE IS NOT COVERED BY THE PRODUCT WARRANTY.

3. Firebox

- **Frequency:** As necessary / Yearly
- **By:** User

Cleaning the firebox and internal heat exchange surfaces is recommended to maintain thermal efficiency. Depending on the quality and quantity of fuel being used, you may want to perform this cleaning monthly.

Be sure to clean these areas thoroughly at the end of the heating season.

Brush and vacuum all internal surfaces at the end of the heating season. Ashes will draw moisture and may promote rust formation.

4. Blower- If installed

- **Frequency:** As necessary / Yearly
- **By:** User

The fan on the blower will collect debris over time. Any accumulation must be removed to maintain proper operation.

To clean blower;

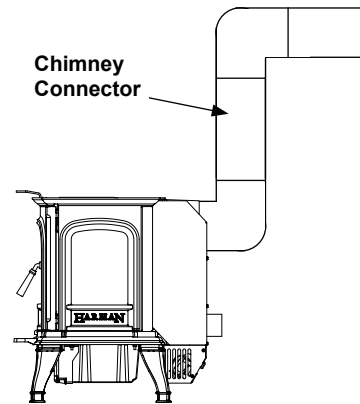
- Disconnect power cord before servicing.
- Remove the two bolts that hold the blower in place.
- Use a vacuum and/or brush to remove all dust and pet hair from the blower wheel.
- Reinstall the blower and tighten the two bolts securely.

5. Chimney Connector

- **Frequency:** As necessary / Yearly
- **By:** Qualified Service Technician / User

At the end of the burn season, brush and clean all sections of chimney connector pipe. Some owners remove the chimney connector for the off season. Any ashes left in the connector pipe will actually draw moisture which promotes rust. This is why it is very important to clean all ashes at the end of the heating season.

When cleaning the chimney connector above the appliance, keep the bypass damper in the open position. This will keep any loosened material from falling into the Firedome combustion chamber.



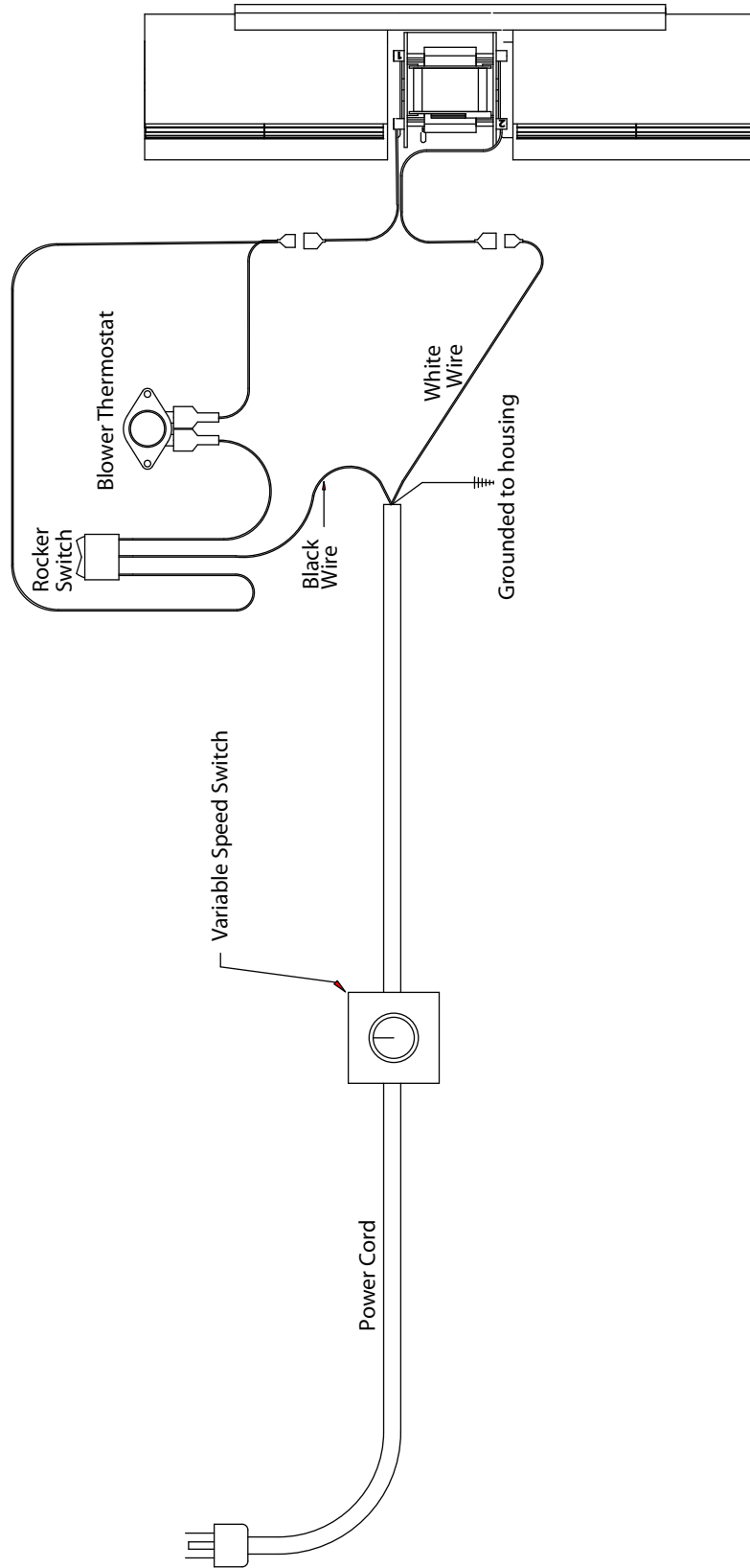
6. Chimney

- **Frequency:** As necessary / Yearly
- **By:** Qualified Service Technician / Chimney Sweep

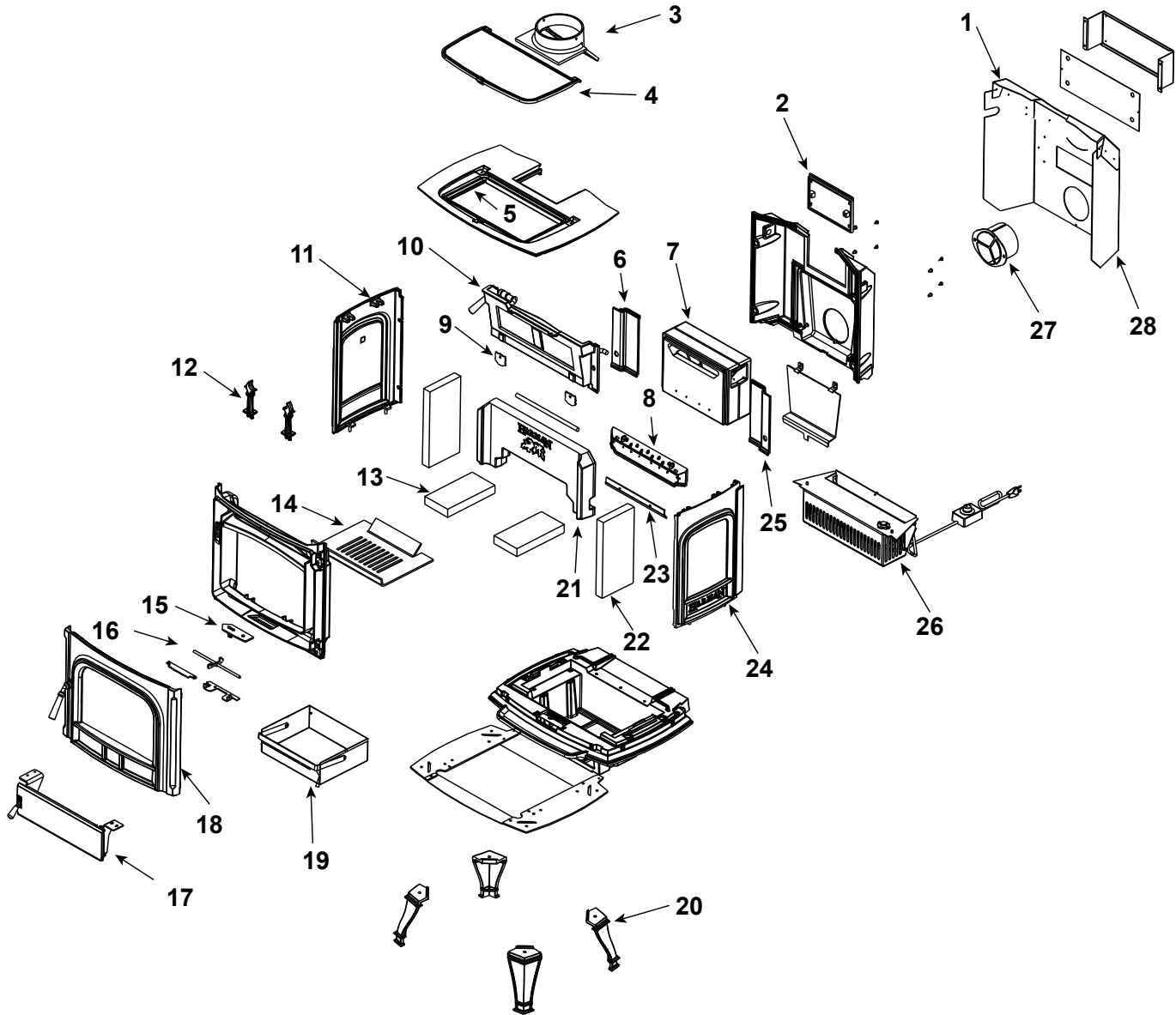
The entire chimney should be professionally cleaned at least once yearly. It is best to have this done at the end of the heating season to be sure all ash is removed. You'll also want to inspect the condition of the chimney prior to using the appliance, to be sure there are no bird or animal nests.

10 Reference Materials

Oakleaf Optional Blower Kit #1-00-797032 - WIRING DIAGRAM



1-90-797000-1 (Black),
((Sept 2010 thru June 2011)--1-90-797000-2 (Charcoal), 1-90-797000-3 (Goldenfire))



Part number list on following page.

IMPORTANT: THIS IS DATED INFORMATION. When requesting service or replacement parts for your appliance please provide model number and serial number. All parts listed in this manual may be ordered from an authorized dealer.



**Stocked
at Depot**

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
1	Heat Shield-Upper Top		2-00-797053P	
	Heat Shield-Upper Rear		1-00-797066	
2	Oak Flue Collar Cover w/Gasket		1-10-249109	
	Gasket-3/8 Round LDPSA	10 Ft	1-00-00999	Y
3	Oak Flue Collar		4-00-249108D	
	Gasket-1/4 Round PSA	15 FT	1-00-2312	Y
4	Oak Top Load Door		3-00-249115P	
	Load Door Handle Kit		1-00-797067	
5	Gasket-3/8 Round LD, Top Load Door	5 Ft	1-00-37525	Y
6	Inside Plate-Left w/Gasket		1-10-797104	
	Gasket-1/4 Round PSA	15 Ft	1-00-2312	Y
7	Oakleaf Package		3-40-797022	Y
	Gasket-1/4 Round PSA	15 FT	1-00-2312	Y
8	Ramp Assembly w/Gasket		1-10-797109	Y
	Gasket-1/4 Round PSA	15 FT	1-00-2312	Y
9	Brick Clip Set		1-00-249153	Y
10	Damper Frame Assembly		1-10-797103A	Y
	Damper Adjustment Kit		1-00-249142	Y
	Damper Handle		3-50-00500S	Y
	Damper Plate		4-00-797113	Y
	Damper Rod		1-10-797036W	Y
	Gasket-1/4 Round PSA, Damper Plate	15 FT	1-00-2312	Y
	Gasket-3/8 Round LD, Damper Frame	5 Ft	1-00-37525	Y
	Screw-SSSKN5/16-18 X 3/8	Pkg of 25	3-30-2004-25	Y
11	Side Left		3-00-797107	
	Gasket-3/8 Round LD	5 Ft	1-00-37525	Y
12	Oak Andiron, Painted		3-00-249101P	Y
13	Brick Set, 9" x 4 1/2" x 1 1/4"	Pkg of 7	1-00-900450125	Y
14	Grate		2-00-797023B	Y
15	Airslide		1-10-797010	
16	Airslide shaft		1-10-797013	
17	Ash Door Assembly		1-10-797110	
	Gasket-3/8 Round LD	5 Ft	1-00-37525	Y
	Wooden Knob, Ash Door		3-40-08746-3	

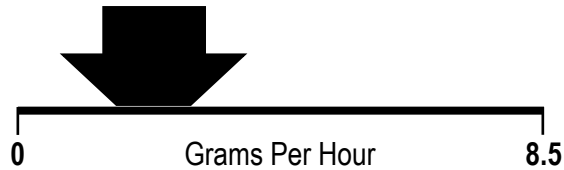
Additional service part numbers appear on following page.

MANUFACTURED BY: HARMAN HOME HEATING MODEL: OAKLEAF

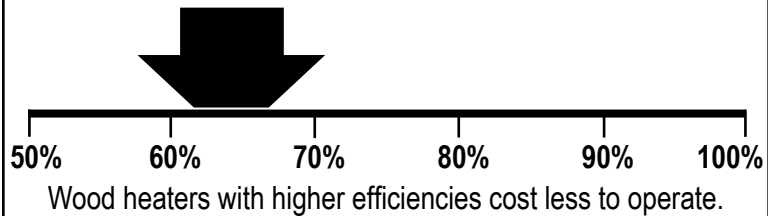
U.S. ENVIRONMENTAL PROTECTION AGENCY

Meets EPA particulate matter (smoke) control requirements for noncatalytic wood heaters built on or after July 1, 1990.

SMOKE



EFFICIENCY



**HEAT OUTPUT
9,600 to 24,700 BTU**

Use this to choose the right size appliance for your needs.

ASK DEALER FOR HELP.

This wood heater will achieve low smoke output and high efficiency only if properly operated and maintained. See owner's manual.

#3-90-799

Hearth & Home Technologies Inc. LIMITED LIFETIME WARRANTY

Hearth & Home Technologies Inc., on behalf of its hearth brands ("HHT"), extends the following warranty for HHT gas, wood, pellet, coal and electric hearth appliances that are purchased from an HHT authorized dealer.

WARRANTY COVERAGE:

HHT warrants to the original owner of the HHT appliance at the site of installation, and to any transferee taking ownership of the appliance at the site of installation within two years following the date of original purchase, that the HHT appliance will be free from defects in materials and workmanship at the time of manufacture. After installation, if covered components manufactured by HHT are found to be defective in materials or workmanship during the applicable warranty period, HHT will, at its option, repair or replace the covered components. HHT, at its own discretion, may fully discharge all of its obligations under such warranties by replacing the product itself or refunding the verified purchase price of the product itself. The maximum amount recoverable under this warranty is limited to the purchase price of the product. This warranty is subject to conditions, exclusions and limitations as described below.

WARRANTY PERIOD:

Warranty coverage begins on the date of original purchase. In the case of new home construction, warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the product by an independent, authorized HHT dealer/ distributor, whichever occurs earlier. The warranty shall commence no later than 24 months following the date of product shipment from HHT, regardless of the installation or occupancy date. The warranty period for parts and labor for covered components is produced in the following table.

The term "Limited Lifetime" in the table below is defined as: 20 years from the beginning date of warranty coverage for gas appliances, and 10 years from the beginning date of warranty coverage for wood, pellet, and coal appliances. These time periods reflect the minimum expected useful lives of the designated components under normal operating conditions.

Warranty Period		HHT Manufactured Appliances and Venting							Components Covered
Parts	Labor	Gas	Wood	Pellet	EPA Wood	Coal	Electric	Venting	
1 Year		X	X	X	X	X	X	X	All parts and material except as covered by Conditions, Exclusions, and Limitations listed
2 years				X	X	X			Igniters, electronic components, and glass
		X	X	X	X	X			Factory-installed blowers
			X						Molded refractory panels
3 years				X					Firepots and burnpots
5 years	1 year			X	X				Castings and baffles
7 years	3 years		X	X	X				Manifold tubes, HHT chimney and termination
10 years	1 year	X							Burners, logs and refractory
Limited Lifetime	3 years	X	X	X	X	X			Firebox and heat exchanger
90 Days		X	X	X	X	X	X	X	All replacement parts beyond warranty period

See conditions, exclusions, and limitations on next page.

WARRANTY CONDITIONS:

- This warranty only covers HHT appliances that are purchased through an HHT authorized dealer or distributor. A list of HHT authorized dealers is available on the HHT branded websites.
- This warranty is only valid while the HHT appliance remains at the site of original installation.
- Contact your installing dealer for warranty service. If the installing dealer is unable to provide necessary parts, contact the nearest HHT authorized dealer or supplier. Additional service fees may apply if you are seeking warranty service from a dealer other than the dealer from whom you originally purchased the product.
- Check with your dealer in advance for any costs to you when arranging a warranty call. Travel and shipping charges for parts are not covered by this warranty.

WARRANTY EXCLUSIONS:

This warranty does not cover the following:

- Changes in surface finishes as a result of normal use. As a heating appliance, some changes in color of interior and exterior surface finishes may occur. This is not a flaw and is not covered under warranty.
- Damage to printed, plated, or enameled surfaces caused by fingerprints, accidents, misuse, scratches, melted items, or other external sources and residues left on the plated surfaces from the use of abrasive cleaners or polishes.
- Repair or replacement of parts that are subject to normal wear and tear during the warranty period. These parts include: paint, wood, pellet and coal gaskets, firebricks, grates, flame guides, light bulbs, batteries and the discoloration of glass.
- Minor expansion, contraction, or movement of certain parts causing noise. These conditions are normal and complaints related to this noise are not covered by this warranty.
- Damages resulting from: (1) failure to install, operate, or maintain the appliance in accordance with the installation instructions, operating instructions, and listing agent identification label furnished with the appliance; (2) failure to install the appliance in accordance with local building codes; (3) shipping or improper handling; (4) improper operation, abuse, misuse, continued operation with damaged, corroded or failed components, accident, or improperly/incorrectly performed repairs; (5) environmental conditions, inadequate ventilation, negative pressure, or drafting caused by tightly sealed constructions, insufficient make-up air supply, or handling devices such as exhaust fans or forced air furnaces or other such causes; (6) use of fuels other than those specified in the operating instructions; (7) installation or use of components not supplied with the appliance or any other components not expressly authorized and approved by HHT; (8) modification of the appliance not expressly authorized and approved by HHT in writing; and/or (9) interruptions or fluctuations of electrical power supply to the appliance.
- Non-HHT venting components, hearth components or other accessories used in conjunction with the appliance.
- Any part of a pre-existing fireplace system in which an insert or a decorative gas appliance is installed.
- HHT's obligation under this warranty does not extend to the appliance's capability to heat the desired space. Information is provided to assist the consumer and the dealer in selecting the proper appliance for the application. Consideration must be given to appliance location and configuration, environmental conditions, insulation and air tightness of the structure.

This warranty is void if:

- The appliance has been over-fired or operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals. Over-firing can be identified by, but not limited to, warped plates or tubes, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes.
- The appliance is subjected to prolonged periods of dampness or condensation.
- There is any damage to the appliance or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.

LIMITATIONS OF LIABILITY:

- The owner's exclusive remedy and HHT's sole obligation under this warranty, under any other warranty, express or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified above. In no event will HHT be liable for any incidental or consequential damages caused by defects in the appliance. Some states do not allow exclusions or limitation of incidental or consequential damages, so these limitations may not apply to you. This warranty gives you specific rights; you may also have other rights, which vary from state to state. EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE EXPRESSED WARRANTY SPECIFIED ABOVE.

At Harman, we build each product to a standard, not a price. This powerful heating appliance boasts uncompromising attention to detail and helps preserve our planet by using environmentally responsible fuels.



(Signature of Boxer)

Your premium quality hearth product designed and assembled by the experienced and skilled members at Harman in Halifax, PA, USA.

HARMAN[™]

BUILT TO A STANDARD, NOT A PRICE

Proudly Printed On 100% Recycled Paper

